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ANN ARBOR, MICH.

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# Manufacturers record

THE INDUSTRIAL SOUTH AND SOUTHWEST

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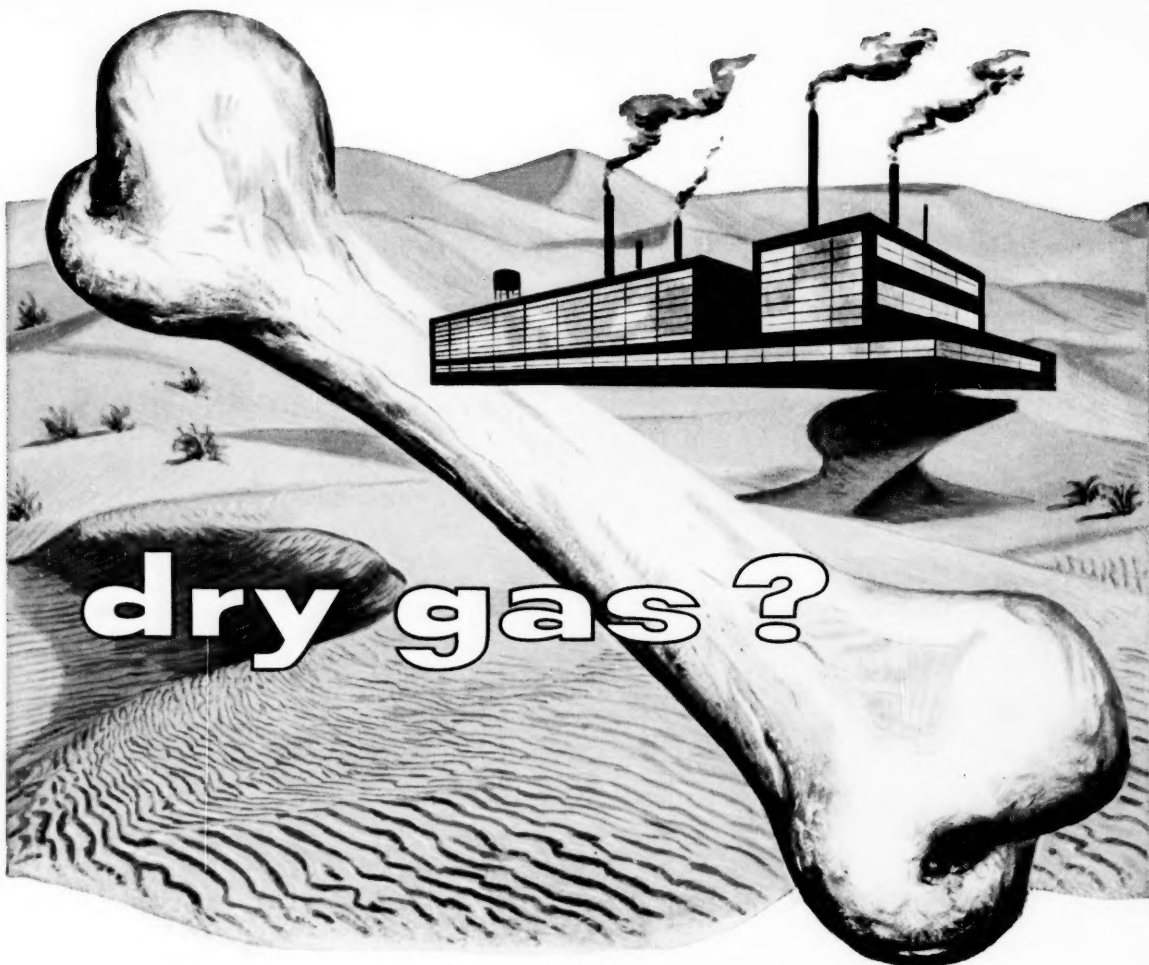
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WILL HAVE 50% WITHIN 10 YEARS.



The South's Traveling Salesman—SASI President Frank J. Soday Averages  
Two Speeches A Month Promoting Industry And Science In Region (p. 20)

A CONWAY PUBLICATION EST. 1882

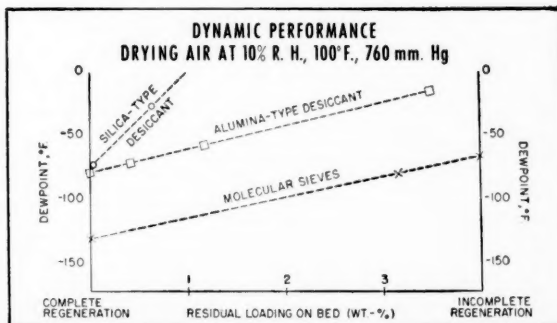


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## Manufacturers record

NEWSMAGAZINE OF SOUTHERN  
SCIENCE AND INDUSTRY—EST. 1882

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**BPA**

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# HOT-DIP GALVANIZING

by

# DIXISTEEL

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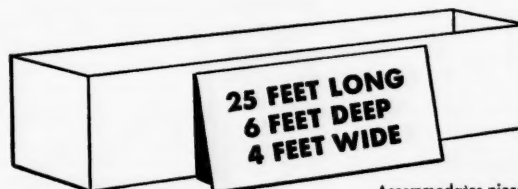
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## LETTERS

**SIRS:** The 1956 Blue Book has arrived and now we're blue! Honest, we've been wearing shoes on weekdays for years now and have gotten accustomed to store-bought likker, even eating high on the hog, now, 'stead of chittlin's!

Under the Virginia heading on Page 105 (the reverse of our advertisement), mention is made of Norfolk, Richmond, Portsmouth and Newport News as "important cities," but lead-off on Western Virginia is concerned mainly with the well-known fact that it has two mountain chains and there is no mention of the manufacturing worth of the area. Because of this, I would like to refer to Jean Gottman's "Virginia at Mid-Century," in which he cites that four of Virginia's six main groupings of manufacturers are located in Western Virginia.

Also, for the record, the 1947 Census of Manufactures shows the Western Southside (mainly Danville-Martinsville area) and the Roanoke-Radford area accounting for more of the state's total manufacturing employment than the Richmond-Petersburg-Hopewell area, and 3.1% better than the Hampton Roads area. ("Virginia at Mid-Century," Page 424.)

"Richmond and Roanoke," writes Gottman, "are centers of a great diversity of manufactures." In the Western Virginia area are cotton mills, mechanical industries, tobacco processing, chemicals, furniture, machinery plants, shoemaking, textiles and electronics installations. Danville is the chief leaf processing center for tobacco in Virginia and at Radford the Hercules Powder Company operates the Radford Arsenal for the United States Government.

It is singular that the Dan River Cotton Mills at Danville equal and at times surpass the employment at the Newport News Shipbuilding and Dry Dock Company, often considered Virginia's major employer (rightly so during wartime). The Dan River Mills, founded in 1882, constitute one of the largest such operations in the United States and one of the oldest in the South.

The names of such "Blue Ribbon" industries as Celanese, Viscose, General Electric, U. S. Steel, Westinghouse, DuPont, Burlington Mills, Olin Mathieson Chemical Company, the Lane Company, Yale & Towne, American Safety Razor, James Lees & Sons, Norfolk and Western Railway, Sweet-Orr, Koppers Company, Appalachian Electric Power Company, Hercules Powder Company, New Jersey Zinc Company, West Virginia Pulp and Paper Company, Liggett & Myers, Allied Chemical & Dye Corporation, National Carbide Company, Craddock-Terry, Brunswick-Balke Collender Company, plus the myriad coal producers and food processors, are household words in Western Virginia.

Gottman says further (on Page 422): "Chemicals and textiles are certainly the two major specializations of Virginia . . ." and Western Virginia is a prime producer of these commodities.

Naturally, we are aware of that space is at a premium in your state-by-state column, but at the same time we feel that a more thorough marshaling of facts, coupled with concise writing, would have put Western Virginia in its proper perspective with relation to the remainder of the state. Surely, Roanoke, being the financial, manufacturing and retailing capital of Western Virginia, was entitled to have its name listed as one of the Blue Book's "important cities" in Virginia.

Western Virginia is truly "The Beckoning Land" with its never-ending supply of easily adaptable labor, raw materials, water, transportation and ample power supply, as the "Blue Ribbon" manufacturers I have listed have already learned.

We have had so many favorable comments on the "Roanoke story" which you published some months back, and are very grateful for your interest in the area. If you would pass this letter along to the proper quarters, perhaps a re-evaluation of Western Virginia will appear in your next treatment of the Old Dominion.

THORNTON M. TICE,  
Promotion Manager,  
Times-World Corporation,  
Roanoke 10, Virginia.

**SIRS:** I have several items that I think are eligible for patents. Among which is a dog mounted on two wheel push carts that produces a running motion, opens and closes its mouth, wags its tail and makes a barking noise when pushed around. Other animals, such as cub bears, lambs, etc., may be supplemented.

This is brought to your attention because of your long and broad experience with manufacturers in an unlimited field of industry, with the hope you may have some helpful suggestion that may lead to the sale of the idea.

If you favor an advertisement run in your magazine, I shall be glad to mail it and your cost for same promptly.

Thanking you for any consideration, I am

H. L. HOUGH,  
241 Park Place,  
Starke, Florida.

**SIRS:** See MANUFACTURERS RECORD, July, 1956, page 44, Colonel M. R. Says.

How do you mean, "one of the few triple puns in the English language." Here is a quintuple pun:

The British Ambassador, named Randolph, and the Russian Ambassador, named Rudolf, were having dinner together with their wives. The British Ambassador looked out the window and said, "It is snowing." The Russian Ambassador said, "If you will pardon the correction, it is raining."

"No," said the British Ambassador, "it is snowing."

"I'm sorry to disagree," said the Russian Ambassador. "It is raining."

"You're wrong," said the British Ambassador, "It is snowing."

The British Ambassador's wife interrupted to admonish her husband: "Please don't make the situation difficult. After all, Rudolf, the Red, knows rain, Dear."

E. H. ROSE,  
National Academy of Sciences,  
National Research Council,  
Washington 25, D. C.

**SIRS:** . . . I must say that I was not particularly surprised in the repeal of our Right to Work law, and I do not foresee any immediate hope of reactivating it soon. The major groups instrumental in passing this law in the first place were the rural agricultural areas in our State. In passing



## LETTERS

the repeal, the union boys and opponents of the Right to Work law watered down this opposition by suggesting a compromise Right to Work bill to cover agricultural employees.

(NAME WITHHELD)

**SIRS:** . . . I agree with you that this board (SREB) should have its hands full right now when the greatest problem confronting the South is education, and I wish that we had more speeches on the present Supreme Court like the one delivered by my friend Smythe Gambrell before the American Bar Association in Hot Springs recently.

H. M. AYERS, Publisher  
The Anniston Star  
Anniston, Alabama

**SIRS:** . . . I am most interested in the work that is being done in the office of public relations at the University of Tennessee. I was also very much interested in your feature "Memphis on the Move" carried in your May issue.

FRANK G. CLEMENT, Governor  
State of Tennessee  
Nashville, Tennessee.

**SIRS:** . . . This (Electronics Map of South) will be of great help to us in contacting various electronics manufacturers in the South.

R. V. ROBISON  
Sales Engineer  
Sylvania Electric Products  
411 Oak Street  
Cincinnati 19, Ohio

**SIRS:** Just a note to say I thought the Southern aviation issue of MANUFACTURERS RECORD was very well done. I'm keeping it as a reference.

LEE ROGERS  
Lockheed Aircraft Corp.  
Georgia Division  
Marietta, Georgia

**SIRS:** Congratulations on all the good work you are doing in behalf of industrial development in the South.

ROBERT J. STALL, JR.  
Industrial Division  
Montgomery Chamber of Commerce  
P. O. Box 79  
Montgomery 1, Alabama

**SIRS:** . . . I have read with much interest your editorial in the July issue of MANUFACTURERS RECORD, dealing with Gore proposals that the government build six atomic power plants in various parts of the country. Your editorial is strong and forthright and should be helpful in giving the public a better understanding of this problem.

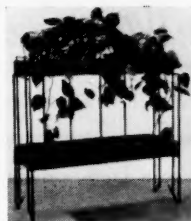
J. M. BARRY, Chairman  
Executive Committee  
The Southern Company  
Birmingham 2, Ala.

September, 1956

## Hendrick Adds Class

### to Locker Rooms and Living Rooms →

More and more designers are including Hendrick Perforated Metal in the fabrication of new products. Typical of these is one company who manufactures the attractive room divider shown here using Hendrick Perforated Metal Square Link design. Another manufacturer installs an attractive Hendrick Ornamental Metal Grille on linen closet and locker doors.



And there are thousands of other applications where Hendrick Perforated Metal has added to product style and functionalism. For information on the type of perforated metal or grille best suited to your needs, call Hendrick today.



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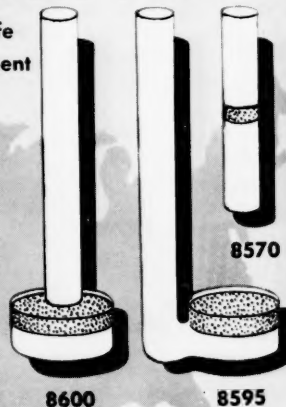
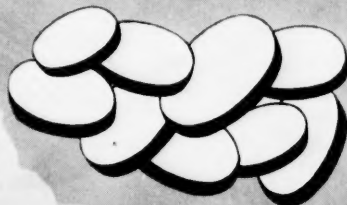
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that could send voices over wires brought  
them together, like a fairy wand, and they  
lived happily ever after.

And the idea grew and grew and now there  
are millions of people every day—and of  
every age—who find happiness and good times  
through the telephone's help  
in bringing lives and hearts together.

Bell Telephone System



### DOLLY PHONE

The cuddly rag doll in the little girl's arms is Dolly Phone,  
designed by Bil Baird of the famous Baird Marionettes.

### A Scientist For Every Boardroom?

A recent issue of *The Journal of Business* published by the University of Chicago Press carried a thought-provoking article on business leadership in the South by Clarence Danhof, who is Professor of Economics at Tulane University. The study discusses the output of top business executives of the various southern states, as listed in *Who's Who in Commerce and Industry*. It also analyzes the proportion of southern business leaders educated here and now pursuing their careers within the region.

As might be expected, the report reveals that the South in the past several decades has been deficient in business leadership, as compared with some other regions. Numerical deficiencies in any recent survey undoubtedly reflect educational and economic conditions which existed in the South at the time our current leaders were growing up.

It is not possible at this time to predict what a similar study might reveal twenty years hence. However, we feel certain that we would find a much brighter picture as a result of recent industrial and technological progress.

But we must agree with Professor Danhof that it is extremely desirable in the South today to promote business leadership, particularly entrepreneurship. We need to encourage a more imaginative approach to our business opportunities.

We have long advocated more attention to scientific research by southern industry. We have also urged more emphasis on product promotion, advertising, and public relations. These are necessary ingredients in manufacturing success today.

Now, we would like to make a specific suggestion to the leaders of southern manufacturing concerns. *We propose that every southern corporation place one outstanding scientist on its board of directors.*

We think this is a plan which has tremendous possibilities. First, it will give our business firms the benefit of technical thinking in charting future plans. Second, it will create friends for southern industry in the colleges, universities, and scientific institutes of the area.

We believe many firms will find that southern scientists would welcome an opportunity of this type. A modest retainer fee would help to supplement the generally low salaries prevailing in educational and scientific institutions. The cost to our business firms would be insignificant.

We do not suggest, of course, that our corporations will be able to find scientists who are experts in every phase of their activities. In fact, it might not be desirable to select such men for this program. Instead, it would be the

purpose of the plan to obtain creative, imaginative people who can bring fresh new viewpoints to the business conference table.

So, we advocate "a scientist for every boardroom" to promote southern industrial progress. We would like to hear from our readers who have an opinion on this proposal.

### A Lesson In Louisiana?

We hope that the repeal of the Right-to-Work law in Louisiana will serve as adequate warning for the businessmen in other southern states. Certainly if this legislation so important to business can be repealed in Louisiana, it can also be removed from the law books in other parts of the region.

From all reports, the Louisiana battle was lost in the legislative elections and in the gubernatorial race. Business interests permitted candidates opposed to right-to-work legislation to gain a majority at the state capitol.

Undoubtedly, industrial development in Louisiana is going to suffer from this action. Expansion-minded industries have indicated a preference for states in which the right-to-work law exists.

This means that the future industrial progress of the South is going to be affected to some extent by the outcome of political races in the region this year. It means that it is more important than ever before for southern businessmen to take an interest in governmental affairs.

We want to emphasize that the RECORD is not opposed to labor unions as such. We would be happy to defend the right of labor to organize if such an issue should arise.

But we think it is equally important that a worker have the right to remain out of a union if he wishes. We agree with the late Peter Marshall, former Chaplain of the U. S. Senate, who said "I am ready to defend the right of a man to join a union, if he wants to, and also the right of another man to stay out of it, if he would rather. I believe that is concerned with fundamental rights in the American Bill of Rights."

We think it is significant that a recent U. S. Chamber of Commerce survey found that "right-to-work laws were on the books of every state where employment trends were better than the national average. Not one state which experienced a greater than average decline has a right-to-work law."

We hope those who are concerned with industrial progress in the various other states will give this matter the attention it deserves. Let's not permit anything to interrupt the remarkable economic strides being made throughout the region.

—H.M.C.

# Special Board Meeting to Consider DOORS



## Exaggerated perhaps, but

doors often warrant much closer attention from management than they are given. Why? Because the wrong doors can tie up "in-and-out" traffic... slow down materials handling... steal costly, usable floor and wall space... multiply maintenance problems... and run up staggering repair and replacement costs. That's why Kinnear Steel Rolling Doors are so often demanded when management takes a close look at all door costs. Kinnear Rolling Doors coil above the opening, completely out of the way. They clear the entire doorway—from jamb to jamb and from floor to lintel. And they stay out of reach of damage by wind or vehicles until closed.

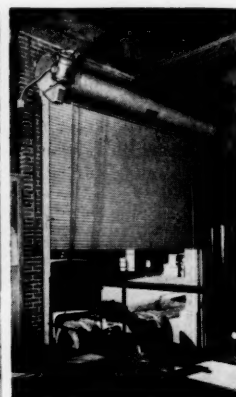
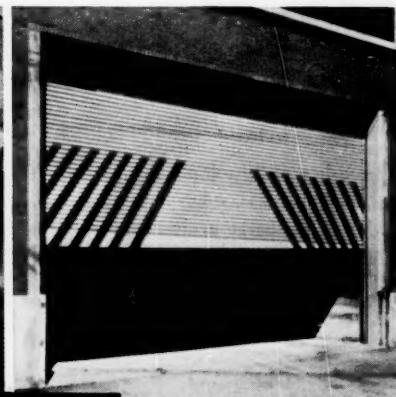
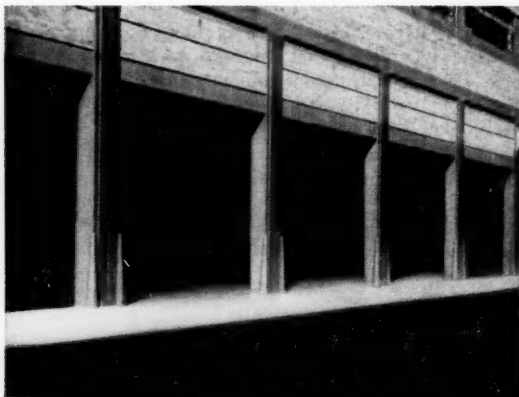
They leave all surrounding floor and wall space fully usable at all times. Materials can be stacked close to door curtain, clear to the ceiling—inside or outside the doorway—without impeding door operation.

In addition, Kinnear's rugged all-steel curtain gives extra protection against wind, fire, theft, intrusion, vandalism.

By opening straight upward and coiling compactly above the doorway, Kinnear Rolling Doors save time, labor, and trouble. They are ideal for motor operation, with remote control switches if desired. Built any size, for quick, easy installation in old or new buildings.

## Heavily Galvanized

The durability of the interlocking steel slat curtain (originated by Kinnear) is also increased by heavy galvanizing, for highest resistance to the elements. Pure zinc is applied to the entire curtain by the hot-galvanizing process (1.25 ounces per square foot, by ASTM standards). Then Kinnear's special Paint Bond is added, to assure thorough, immediate, lasting adhesion of paint to the installed doors.



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in  
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William Beury ...1943-1955  
McKinley Conway...1956-

# MANUFACTURERS RECORD

(IN REVIEW)



September, 1883

(AS ABSTRACTED MORE THAN 70 YEARS LATER)

BALTIMORE, MD.

## The Unsanitary Conditions of Small Towns

The sanitary condition of small towns is often, and indeed generally, execrable. Nothing but favorable location and abundance of pure air prevents serious results, and even under the most favorable circumstances the unhealthy condition of these towns becomes a matter of notoriety. The *Sanitary Engineer*, in a sensible editorial on the sewerage of small towns, introduces its remarks by the assertion that out of nearly two hundred towns in the United States, containing between five and ten thousand inhabitants, and having a public water supply, there are many which certainly have no sewerage system, and more which are believed to be without any; going on to draw the familiar picture of such places, with their houses clustered together on small lots, each with its cesspool, slowly saturating its own and the neighboring cellars with poisonous liquids, and most of them with a foul privy in addition, contributing its stench to the noisome air.

The *American Architect*, Boston, commenting upon this state of things, adds: We are a little surprised that the *Sanitary Engineer* should be so unfamiliar with the filthy ways of New England cities as to limit its observation to places of only ten thousand inhabitants. To our own knowledge there is at least one city with a population of sixty thousand to which the description quoted applies with literal fidelity; and we have in mind another town of nearly twenty thousand inhabitants, so far civilized as to have at this moment under consideration the expenditure of something like a hundred and fifty thousand dollars for public parks in which there is not a single foot of public sewer. The reputation of the place for healthfulness, as may be imagined, is none of the best, and the proposition to appropriate for parks the sum which would make a very efficient beginning in providing the town with a thorough system of drainage, has to the dispassionate mind something the air of a scheme for dressing up a pig with ribbons, and leading him forth into genteel society.

## The South's Triumph

There is no danger of Mr. Wendell Phillips being too enthusiastic as to the future of the South, and hence the following extract from his late speech at the Boston Mechanic's Society may well attract attention:

"The handwriting is so plain on the wall that none but a fool need mistake it. New England is doomed just as sure as natural laws will produce fixed results. New England has no soil worth mentioning, and her wealth has been derived from her manufacturers. These are gradually leaving her, and eventually they will all go, some to the West, the most to the South, where the advantages for profitable manufacturing are

all located. The coal and iron in the South are easily gotten at and inexhaustible in amount, and the iron mills, the foundries and machine shops can go to them better than they can be carried to the shops. Then cotton and woolen mills must go there, for the raw materials are, and are to be, produced there most cheaply, uniformly and better. Then look at the advantages of the extra hours of daylight in a year's run. This, of itself, is no small matter. As the South grows stronger and stronger the wealth, culture and power of the country will be centered there until she will become not alone the mistress of America, but the central empire of the world."

## Birmingham's Growth

Some idea of the marvellous growth of Birmingham, Ala., is shown in the increase of the assessed value of the county in which that town is located, from \$3 million to \$8.3 million since 1880. Three years ago there was but one furnace in the county, and the total output of pig iron for the State was 79,000 tons. There are now eight hot blast coke furnaces in the county, five in Birmingham and the others close by, which will alone this year make not less than 350,000 tons of iron. Jefferson county thus makes over 200 percent more iron than did the whole State three years ago.

In coal production, it is even more remarkable. In 1880 Alabama produced 323,000 tons of coal. By the end of this year Jefferson county will have put out over 1 million tons. This is an increase for this county of over 300 percent, above the coal production of the State three years ago. Anniston, Ala., and Roanoke, Va., are also

examples of this enormous development now in progress at the South, while hundreds of other cities are following in the same good way, though perhaps not quite so rapidly.

## Manufacturing

Mr. John E. Rowland, proprietor of the William Hager Flour Mill, near Hagerstown, Md., has just put about \$10,000 worth of new roller machinery in his mill.

The success of the hosiery factory at Columbia, S.C., has been so great that Mr. Moulton, the proprietor, contemplates removing the machinery from his Laconia Mill, in New Hampshire, to Columbia, where there is already sufficient machinery to turn out 10,000 pairs of stockings a day.

The United States Coal, Iron and Manufacturing Company has been incorporated in West Virginia, with a capital stock of \$1 million. The principal office is at Pittston, Pa.

A Chicago company has been organized for the purpose of manufacturing paper in Florida from the palmetto. They have a capital of \$200,000.

It is stated on good authority that the Alabama tin deposits cover over 4,000 acres of land. The ores, it is claimed, yield a larger percentage than the famous Cornwall tin mines in England.

All the Tuscaloosa, Ala., cotton factories are reported to be running on full time, and are making money.

The machinery for the new cotton-seed oil mill at Albany, Ga., is being rapidly placed in position.

A new enterprise is on foot in Atlanta, Ga., to manufacture cotton and woolen factory supplies (in hard wood).



ROOM AND BOARD, \$2.50 PER DAY.

September, 1956

MANUFACTURERS RECORD

7



## Gone with the wind!

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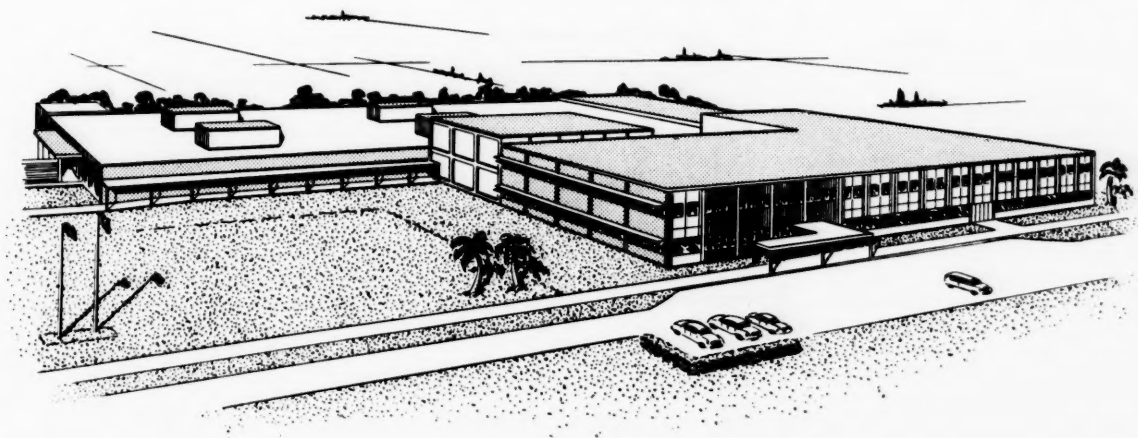
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*Harry A. DeBette*  
President



# SOUTHERN RAILWAY SYSTEM

WASHINGTON, D. C.



Artist's sketch of Minneapolis-Honeywell's \$4 million plant to be constructed north of St. Petersburg for the corporation's Aeronautical Division. The concrete block structure will contain 207,500 square feet of space initially, including more than 90,000 for production. Parking space for 1,200 cars will be provided adjacent to plant.

## Minneapolis-Honeywell Reveals Plans For \$4 Million St. Petersburg Facility

ST. PETERSBURG, FLA. A new aeronautical plant costing more than \$4 million will be erected by Minneapolis-Honeywell Regulator Company on a 95-acre site southwest of the Pinellas County International Airport, company officials have announced here.

It will provide employment for some 1,500 persons by mid-1957.

Honeywell is the world's largest manufacturer of automatic control equipment. Its Aeronautical Division, with headquarters in Minneapolis, is one of the nation's leading producers of automatic flight control systems and other automatic control equipment for planes, rockets and missiles.

The new plant in Pinellas County will be devoted to the development and production of a highly-advanced type of aerial navigation equipment, known as inertial guidance systems. Inertial guidance is a new concept that permits guidance—of intercontinental ballistic missiles, for example—without reference to radar, radio, beam guidance, star tracking or human pilot.

Construction of the new facility will start immediately, with produc-

tion expected to begin early in 1957. The plant will provide 207,500 square feet of space, be modern in design and planned with a view to future expansion.

Honeywell officials, headed by Harold W. Sweatt, chairman of the board, and Paul P. Wishart, president, announced details of the industrial development at a dinner at the St. Petersburg Yacht Club, attended by local and state civic and business leaders, and representatives of the press, radio and TV.

Other Honeywell executives in attendance included Stephen F. Keating, vice-president in charge of the firm's Aeronautical Division, and Melvin P. Fedders, vice-president of the division, who will be general manager of the new Florida plant.

### To Employ 1500 Workers

Wishart disclosed that an estimated 1,500 engineering, administrative and production employees will be needed in the new operation when full-scale production is reached. They will represent an annual payroll of \$7 million.

"Employment needs probably will continue to mount through 1960 at least," he said.

Total cost of the new facility is estimated at more than \$4 million. The building will cost about \$2,250,000. Machine and tools will account for about \$1,500,000. Miscellaneous equipment will make up the remainder of the initial investment.

The 95-acre site on which the plant will be erected lies near the junction of Highway 19 and Ulmerton Road in the triangle formed by St. Petersburg, Tampa and Clearwater. The initial facility will include a 92,000-square foot production building. It will be rectangular in shape, on one level, and smokeless and noiseless. An attached administrative and engineering building will contain 115,000 square feet on two levels.

Although Honeywell has factories located throughout the United States, and in four foreign countries, the plant in Pinellas County will be its first industrial facility in Florida. The company's Aeronautical Division has its main plant in Minneapolis, with an aeronautical engineering center in Los Angeles and service engineering offices throughout the world. The division now employs more than 5,800 persons. Total employment for the Honeywell corporation is near 28,000.

Research, design and prototype manufacture of inertial guidance systems has been underway for sometime

in the Minneapolis aero plant. Research in the inertial field will continue there, and at the Honeywell Research Center, located in a Minneapolis suburb.

"Our decision to build a new plant devoted wholly to development and production of inertial guidance systems," Wishart said, "was due to receipt of new government contracts, and our plans for expanded activity in the inertial guidance field."

He said Honeywell selected Florida as a location primarily because of the state's manpower resources. Among other reasons for the choice is the federal government's program for dispersal of industry, and the need for fulfilling certain physical requirements for the new plant.

One of these requirements is soil that will help dampen natural building vibrations. A minimum of vibrations is necessary because of delicate manufacturing and testing procedures. Inertial guidance systems require the highest type of precision manufacturing known in industry, often calling for tolerances in the millionths of an inch.

"In both the design of the building and landscaping," he said, "our architects have kept in mind that the plant will be surrounded by fine residential areas. We fully expect that, appearance-wise, the building will compliment, rather than detract from, the natural beauty of the metropolitan area."

Fedders said Honeywell will bring about 300 key administrative, production and engineering personnel from Minneapolis as the nucleus of the staff for the new plant. More than 150 additional professional engineers will be needed by early 1957, plus supporting technicians and draftsmen, he said. Several hundred production employees with a variety of skills will be needed soon after the plant is completed.

Erection of the new plant will mark another major forward step in the steady expansion of Honeywell's Aeronautical Division. The company's experience in the aero field dates back to the early days of World War II, when it developed the aircraft industry's first electronic automatic pilot.

Since that time, Honeywell's Aero Division has produced more electronic automatic pilots than any other company in the world. Today, it is

supplying advanced flight control systems for many of the nation's latest jet fighters and bombers, including McDonnell Aircraft Corporation's F-101A Voodoo supersonic escort fighter, and North American Aircraft's F-100D Super Sabre, which is the nation's front-line interceptor.

Among other important work, the Aeronautical Division currently is building the guidance system for the Project Vanguard rocket that will attempt to place man's first earth-circling satellite in its orbit. The launching of the earth satellite rocket is scheduled as a part of the International Geophysical Year.

In addition to being a leader in the flight control field, Honeywell's Aeronautical Division also is a major supplier of highly-accurate gyroscopes, electronic fuel measuring systems, and other automatic control devices and systems for military and commercial aircraft, rockets and missiles.



Magnesium magnate E. Howard Perkins.

## Alabama Gets Magnesium Unit

SELMA, ALA. The South's dominant position in the production of light metals will be accentuated by a new \$7 million magnesium plant to be built here. The new facility, which will add 15 percent to the nation's magnesium output, is to be built by a Detroit firm, Brooks and Perkins, Inc. Announcement of plans was made

last month by E. Howard Perkins, Chairman of the Board. He said options have been taken on 430 acres on the Alabama River, 50 miles West of Montgomery, and the plant probably will be in operation in 1957.

Brooks and Perkins and Dominion Magnesium, Ltd., of Toronto, will be in joint ownership of the new high purity magnesium corporation—the Alabama Metallurgical Corp.—Perkins said. He is chairman of the board and Lester G. White, who was managing director of Dominion Magnesium until recently, is president.

The plant, with a \$1,000,000 yearly payroll, will have a rated annual production capacity for high purity magnesium of 10,000 tons.

There is only one other commercial producer of magnesium in the United States. The only company in the world successfully supplying the high purity metal at competitive prices by the ferrosilicon reduction process is Dominion Magnesium.

This process is based on the use of silicon as a reducing agent, reacted in the form of ferrosilicon with magnesium oxide obtained from burnt dolomite rock. The raw material is dolomite.

Perkins and White said geological surveys throughout the nation began two years ago. Hundreds of tons of dolomite were shipped to Canada for full-scale tests at Dominion Magnesium.

The Alabama rock, in virtually unlimited supply, was found to be "excellent in all respects," Perkins said. Other reasons influencing the decision to situate in Alabama are the South's year-round mild climate, which lowers construction costs and gives uniform operating conditions, low cost fuel in the form of natural gas in nearby fields and a large supply of available labor. The Alabama River also may be made navigable to that point in coming years, he said.

Perkins said the use of magnesium, the lightest structural metal, has been increasing steadily. He predicted that, at the present rate of climb, monthly use will equal total monthly capacity in 18 to 24 months.

White said the word "magnesium" is not used in the new company's name because other metals also will be produced. Calcium metal, used in the reduction of thorium, will be produced and the production of other related



## INDUSTRIAL PROGRESS

chemical and metallurgical products is being considered.

Perkins organized the partnership Brooks and Perkins in 1943 to fabricate magnesium sheet metal assemblies. It later was incorporated with Perkins as president and chairman of the board. The firm has pioneered in the design, fabrication and application of formed magnesium sheet assemblies in aircraft, electronics, airborne and other portable equipment.

White severed 14 years with Dominion Magnesium, starting out by supervising construction of the plant and working through a succession of positions to become managing director.

The silvery-white magnesium has been known as a metal since 1828 but only within the past 25 years has it been used to any extent for structural purposes. Its additional use as a reducing agent in metallurgical processes is increasing rapidly. The reduction of uranium, titanium and zirconium requires large quantities of magnesium.

Cathodic protection of ships, pipe lines and piping installations, with magnesium acting as a protective anode to reduce corrosion of steel, is an expanding field.

The next lightest metal, weighing about 50 per cent more, is aluminum.

Walter L. Couse and Co., Detroit, will be engineers and contractors on the Alabama project.

### GE Picks Tennessee For Motor Plant

MURFREESBORO, TENN. The recently-announced General Electric plant here will be another impressive addition to the firm's growing list of Southern units. (See MR July, 1956, p. 29). This fact is evident from revelation of detailed plans by Carl W. Moeller, general manager of the Company's Appliance Motor Department.

The new Murfreesboro plant—GE's first in the TVA territory—will manufacture fractional horsepower motors for home laundry and electric sink appliances. The 135,000 square foot facility is expected to be completed late next year and will employ about 500 persons when capacity production is reached.

Moeller indicated that the decision

## LATE NEWS HIGHLIGHTS

DENISON, TEXAS. Johns-Manville Corporation has announced location of an asbestos-cement pipe plant here as a part of a nationwide \$40 million expansion program. Approximately 270 workers will be employed in the new 350,000 sq. ft. plant here which will be situated on a 400 acre site.

PENSACOLA, FLA. American Cyanamid Company has announced definite plans for the construction of a new Creslan Synthetic Fiber plant here. The new facility, which has been under discussion for some time, will employ 350 workers, including some 55 chemical engineers and technicians. To operate the new plant Cyanamid has established a new fiber division headed by Alden R. Loosli.

PORT MANSFIELD, TEXAS. Contracts exceeding \$2 million have been let for the construction of new harbor facilities and for dredging of the channel from this Port to the Gulf of Mexico. The work, which is to be completed by March 1st, will open new possibilities for industrial development in this area.

BURLINGTON, N. C. Announcement has been made that the Cerlist Diesel Corporation will open an assembly plant here early in 1957. The locally-chartered company has already sold stock amounting to \$1.25 million and expects to employ approximately 100 workers.

AUBURN, ALA. The Atomic Energy Commission has announced approval of a loan of 5,500 lbs. of natural uranium metal, plus a neutron source, to the Alabama Polytechnic Institute here. The uranium will be used in a laboratory installation set up for training nuclear engineers.

NEWPORT NEWS, VA. Dow Chemical Company has announced plans for a \$15 million synthetic fiber plant on a 600 acre site near here. The new unit, which will employ about 600 workers, will be built at a location on the James River which was selected about five years ago.

GADSDEN, ALA. A multi-million dollar expansion of the Republic Steel Corporation's plant here is expected to be completed in April or May of 1957. A recent announcement has revealed that a 600 man construction force is busy on the installation of new strip mill equipment and the South's biggest electric furnace.

ATLANTA. Armco Drainage & Metal Products, Inc. has announced plans for a new \$500,000 plant three miles south of suburban College Park. The 60,000 sq. ft. plant employing 125 workers will be located on a 52 acre tract.

PORT SULPHUR, LA. A new \$4 million river transfer station to facilitate loading of coal and phosphate from Mississippi River barges to ocean-going vessels will be erected here soon. Plans for the facility were announced jointly by Cyrus S. Eaton, board chairman of West Kentucky Coal Company, and Mark E. Easton, Jr., president of River and Gulf Transfer Company.

CANTON, N. C. One of the world's largest machines for the production of white business papers will be installed at the Champion Paper and Fibre plant here, according to president Reuben B. Robertson. The new 220 inch machine will be placed in operation sometime in 1959 as a part of Champion's long range expansion program.

to expand operations to Murfreesboro was based on forecasts of the 1965 appliance market which indicate production levels double the 1955 volume. This expected business growth will overtax the department's production facilities in DeKalb, Illinois, and Fort Wayne, Indiana.

"The selection of the mid-south as a location was based on several customer moves to this area. The new location will enable us to give better service with the establishment of a General Electric motor source in this part of the United States. Our new location will provide us the added insurance of dual sources of steel and other raw material supplies. The new plant will also enable the department to benefit from transportation advantages in being near these customers and raw material sources."

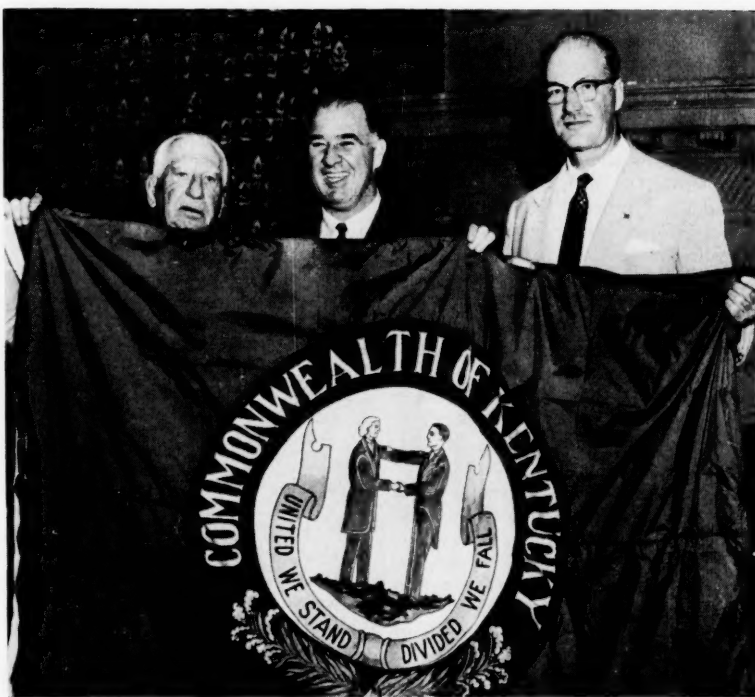
"Sales of automatic washing machines, including the relatively new combination washer-dryer, are expected to increase almost one hundred percent by 1965," according to Moeller. "While the demand for individual clothes dryers should increase over one hundred percent during the same period, sales of electric sink appliances are expected to increase over two hundred percent by 1965."

### Mead Buys South Carolina Mill Site

CALHOUN FALLS, S. C. Another boost for the South's mushrooming pulp and paper industry is seen in the purchase of a 1,000 acre site near here by Mead Corporation last month. Located on the Savannah River three miles west of here, the tract is considered ideal for a pulp and paper operation.

In announcing the purchase, Mead President H. D. Whitaker did not reveal construction plans. However, it is significant that Mead and affiliated companies own more than one million acres of managed timberlands in Georgia, Alabama, Tennessee, and North Carolina.

A manufacturer of pulp, paper, and paperboard, Mead employs 8,600 men and women in operations located in Chillicothe, Ohio; Brunswick, Macon, and Rome, Georgia; Escanaba, Michigan; Leominster, Massachusetts; Sylva, North Carolina; Kingsport, Knoxville, Harriman, and Nashville, Tennessee; and Lynchburg, Virginia.



F. W. Magin, chairman of the board of Square D Company, Governor A. B. (Happy) Chandler, and Gordon Patterson, company president, hold a Commonwealth of Kentucky flag presented by the governor to the company following an announcement that Square D would build a \$3 million plant in Lexington.

## Square D Electric Equipment To Be Made In New \$3 Million Kentucky Plant

LEXINGTON, KY. Square D Company is scheduled to break ground this month for its recently-announced \$3 million electrical equipment plant here. According to President Gordon Patterson, the new 150,000 square foot plant to be situated on a 29 acre site here will contain "the most modern high production machinery."

Square D's schedule calls for breaking ground in Lexington within 60 days and for completion of the project in one year. An initial requirement of several hundred employees is anticipated. Meanwhile, the company is launching pilot operations in the same city and has leased a 12,500-square-foot building for the assembly of special panelboards and switchboards for regional markets.

According to Mr. Patterson, the Lexington plant is included in Square D's \$9,000,000 expansion program announced in February. As part of

the same program, the company has previously announced a major new facility being built in suburban Milwaukee, which will mass-produce electrical controls, and two smaller regional assembly plants in Atlanta and Denver.

"A continuing high level of demand for the electrical distribution and control devices produced by Square D has confirmed the need for greatly increased plant capacity," Mr. Patterson stated, "and has led to an accelerated rate of expansion."

"Concurrently, we are engaged in regrouping and bringing together many related manufacturing operations among various plants," he said, "so as to obtain maximum efficiency and make possible not only the expansion of existing product lines, but also the introduction of several new engineering developments now reaching the production stage."

## INDUSTRIAL PROGRESS

### S. C. Pulp Mill Cost Set At \$35 Million

CALHOUN, TENN. Construction of the proposed Bowaters pulp mill in South Carolina is expected to begin in early fall. K. O. Elderkin, vice president and general manager of the Bowaters Southern Paper Corporation, announced recently.

Speaking to a group of Rock Hill and Lancaster business and civic leaders, Mr. Elderkin said he hoped grading at the York County site near Catawaba Junction will be completed "before bad weather sets in". Two million yards of earth must be moved, he said. It is expected the 400-ton sulphate pulp mill will be in operation early in 1959.

The South Carolina visitors were guests at the Bowaters Tennessee mill for two days. They toured the mill, watched three farming demonstrations, and visited local civic and business leaders. All of the visitors agreed the odor of the modern mill is not objectionable.

Elderkin introduced T. C. Bannister who will be manager of the proposed mill and H. C. Carruth who will be woods manager. Bannister has been sulphate superintendent at the Tennessee mills and Carruth has served as assistant woods manager.

Initial costs of the South Carolina mill were estimated by Elderkin at approximately 35 million dollars. Later expansion could eventually increase the value of the investment to 100 million dollars, he said.

"While I cannot forecast economic conditions, it is not our intention to leave the new South Carolina mill at the 400-ton production figure," Elderkin told the South Carolina visitors. "It will be possible to expand the Catawba mill to as much as 1,000 tons daily."

The name of the new pulp mill will be Bowaters Carolina Corporation.

### 350 Permanent Workers

When completed, the mill will provide employment for 350 persons. At the peak of construction, it is believed contractors will employ from 1,000 to 1,200 men. The visitors learned an estimated 6,000 persons are working



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either part time or full time in producing the pulpwood requirements of the Tennessee mill.

Design of the new mill is being handled by the engineering department of the Tennessee mill at Calhoun. A decision has not been reached as to whether a general contractor or individual contractors will construct the South Carolina mill.

Bannister has been connected with the pulp and paper industry for 17 years. Prior to joining Bowaters he was associated with the Hollingsworth and Whitney Division, Scott Paper Company, Mobile, Alabama. In addition, he had worked with U. S. Gypsum, Crossett Paper Mills, and Monsanto Chemical Company. He is a graduate of the University of Alabama with a bachelor of science degree in chemistry.

Carruth is a graduate of the forestry school at the University of Georgia. He has been associated with the Georgia Forestry Commission, Georgia Agricultural Extension Service, Coosa River Newsprint Mill, and Union Bag and Paper Corp.

## South Carolina Lands New Velvet Plant

LEESVILLE, S.C. The J. B. Martin Company, one of this country's leading manufacturers of velvets and narrow fabrics will establish its first southern operation here. R. M. Cooper, Director of the State Development Board, announced recently.

A new building of 50,000 square feet to cost approximately \$500,000 will be constructed in the near future. The company, which has four other plants in the United States and subsidiaries in Canada, Mexico, Argentina and Brazil, will employ about 50 persons at the Leesville plant.

## Loom, Machine Works To Cost \$1 Million

GREENWOOD, S.C. Southeastern Loom and Machine Works, a division of Abney Mills, is building a modern, one-story plant in Greenwood, South Carolina which is expected to be in operation by the end of the year.

Southeastern employs 300 people and has an annual payroll in the neighborhood of \$1 million.

The tract of land contains sufficient acreage which will provide ample space for parking and future expansion.



Expansion minded Charles L. Hardy is director of the Ryerson building program. He is shown here in recent meeting with executives of Reynolds Aluminum.

## Ryerson Steel Announces Plans For New Service Plant In Charlotte

CHARLOTTE. Details of the new steel service plant to be built for Joseph T. Ryerson & Son, Inc., here have been disclosed by Charles L. Hardy, president.

Announcement of the purchase of property for the plant, an 11½ acre tract at Pinoca in Mecklenburg County, immediately northwest of the Charlotte city limits, was made last November.

The two-span warehouse to be constructed on the site will have adequate floor space for stocking a comprehensive range of carbon, alloy and stainless steels, Hardy said. The building will be heated throughout, for the comfort of workmen and to preserve the finish of certain types of steel.

A two-story office building, an integral part of the structure and facing on Rozzelles Ferry Road (State Highway 16), will contain 8,000 sq. ft. of space. Offices will be air conditioned.

The new plant will have outer walls of stainless steel formed in the distinctive Mansard pattern which has corrugations spaced 6 inches from center to center as contrasted with the

conventional continuous corrugations. The sandwich type walls, in which the inner surface is made of corrugated galvanized steel, with rigid insulation board between, are built up in the field on a structural steel framework. This material is said to afford insulating qualities equal to those of a standard brick wall. It is attractive in appearance and practically maintenance free.

The company has pioneered in the use of stainless steel for craneway type industrial building construction, winning an award in 1955 in FACTORY magazine's annual competition for significant plants of the year.

Equipment in the new plant will include 15 and 10 ton bridge cranes, a high speed friction saw for cutting structural steel shapes, plate and sheet shears, hack saws, and a mechanized flame cutting machine equipped with an electronic eye tracing device for more accurate cutting of intricate shapes from steel plate.

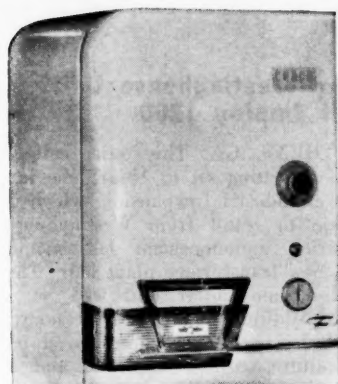
Hardy said that well rounded stocks of bar, structural, plate, sheet and tubular steel would be carried at the



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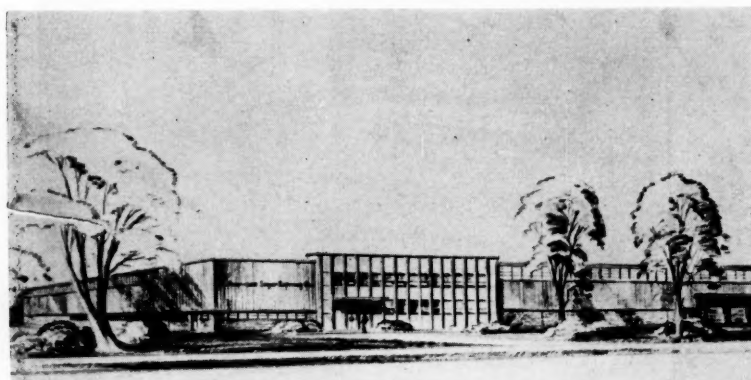
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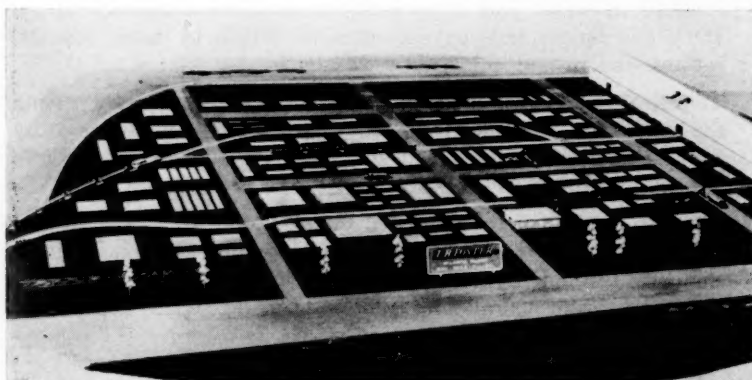
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Mallory-Schwarzkopf Metal's new plant in Huntsville, Alabama, now under construction, will produce and fabricate rare and refractory metals, such as molybdenum, tungsten and tantalum. The plant, which is self supporting steel frame with concrete foundations and floor, is expected to begin operations in January, 1957.



American Sugar Refining Company, refiners of Domino Pure Cane Sugars, is building a \$2.5 million plant in Charleston, South Carolina, for the manufacture of paper bags. The plant will occupy nearly three acres of floor space, and it is expected that full operations will start in November of this year. The site provides room for further expansion and ample parking space.



The L. B. Foster Company is planning transfer of warehousing facilities from its present seven acre area to a new 18 acre site in Atlanta. Included on the site are facilities for reconditioning piling and rail and for cutting structural grade pipe to customer specifications. The site will contain a 16 by 30 foot office building and a 100 by 300 foot enclosed storage shed. A 100-foot overhead crane and two 25 ton capacity locomotive cranes will handle bulky material.

new plant, in kinds and sizes to satisfy the needs of steel consumers in the area. Provision has been made for expansion, to accommodate still larger and more diversified stocks, whenever such a move becomes necessary.

The company began operations in Charlotte late in 1953, in leased quarters, under the direction of Wilson A. Young, district sales manager.

"We are confident that this area will continue to develop at a fast pace," Hardy declared, "and our building plans have been laid accordingly. Charlotte occupies a strategic position in that it lies practically in the center of the industrial southeast, thus becoming a logical distribution center for this important section of the country."

The Ryerson company, 114-year old concern and the country's largest steel distributing organization, now operates 17 steel service plants that serve almost the whole of the United States, and will soon build its 18th plant, in Indianapolis. Its new Charlotte plant will be completed in late 1957.

## New Westinghouse Unit Will Employ 1200

ATHENS, GA. This quiet college town is getting set to absorb the impact of industrial expansion, which is certain to result from Westinghouse Electric's announcement last month of a new transformer plant here: The multi-million dollar unit will be a major addition to the local economy, which has previously been based on agriculture, college students, and a scattering of small industries.

O. O. Rae, vice president in charge of the company's Southeastern region in Atlanta, said the new plant will be part of the Transformer Division which is headquartered in Sharon, Pa.

"Additional manufacturing facilities are needed," Rae said, "to meet the constantly growing market for pole-type distribution transformers. The new plant will approximately double the output of present facilities in this department at Sharon."

The Westinghouse executive pointed out the Sharon production of this type of transformer will continue and "there will be no material effects in the manufacturing operations" at that plant.

At the same time, Rae announced

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that Gordon C. Hurlbert, manager of the distribution transformer department at Sharon, has been named manager of the new plant. He will continue to be responsible for distribution transformer operations at Sharon.

Construction of the new plant, located on a 252-acre site on Newton Bridge Road and near the Southern Railroad tracks just north of the Athens city limits, will begin immediately. The building will be a one-story structure containing approximately 750,000 square feet, of which 633,000 will be devoted to manufacturing space.

When operating under capacity conditions, which is expected to be by 1960, the plant will employ about 1200 people, Rae said. Actual production is scheduled to begin in mid-1958.

"Only some key engineering, sales and administrative personnel from Sharon will be transferred to the Athens location," he stated. "All production employees will be hired from Athens and surrounding communities."

Hurlbert is a native of Raymond, S. D., and was graduated from Marquette University in 1946 with a bachelor of science degree in mechanical engineering. He joined the Westinghouse graduate student training program in October of that year and held various positions in the engineering section at Sharon as well as assignments in the purchasing departments at Lima, O., Pittsburgh headquarters and South Philadelphia.

### Alabama Power Pushes River Development Plan

BIRMINGHAM. Application has been filed with the Alabama Public Service Commission for a certificate of convenience and necessity by the Alabama Power Company.

The Power Company wants to build a multiple purpose dam on the Sipsey Fork of the Warrior River in Alabama and to install power generating facilities in the existing United States dam, Lock No. 17.

These new facilities, which will conform to the comprehensive plan for development of the upper basin of the river, will represent an ultimate investment of over thirty-seven million dollars which will be provided by the company.



John R. Tusson—President of newly-formed Chemoil Corporation of New Orleans.

### Louisiana Chemist Plans \$20 Million Oil Refinery

NEW ORLEANS. Plans are moving forward for a new \$20 million oil refinery here, according to John R. Tusson, president of the Chemoil Corporation of New Orleans, a new firm organized for this purpose.

The new refinery will have a capacity of 20,000 barrels of crude per day. In emphasizing the need for an oil refinery in the southern Louisiana area, Tusson said that his new firm already has "commitments for 100 percent of our finished products." The organization also has commitments for purchase of crude from the extensive south Louisiana production areas.

To date, no site has been decided upon, but it is known that the company is in the market for an area of about 600 to 1000 acres within 25 miles of New Orleans. When completed, the refinery will require about 150 workers and will be of the latest design.

Tusson said the New Orleans area was chosen because of the "major production of crude oil in the vicinity." "Studies," he concluded, "have shown that processing capabilities have lagged far behind production."

### Florida Expansion Set By Seaboard Railroad

NORFOLK. The Seaboard Air Line Railroad has announced that it now has underway a \$1,500,000 development program in the vicinity of Brooksville (Fla.), including construction of a new hump classification yard, in anticipation of heavier freight transportation demands from expanding rock mining operations in the area which are expected to double present production.

The railroad recently purchased 36 acres of land along the east side of its existing main line four miles north of Brooksville as a site for the new yard. Approximately 170,000 cubic yards of grading is now being done on this phase of the classification area, in order to accommodate 14 miles of new tracks which will comprise the yard proper. The grading is being done by the Cone Brothers Construction Company of Tampa, low bidders for the work.

The yard area will be 200 feet wide and two miles long. It will have 15 classification tracks with a total capacity of 1,237 cars, ranging in individual capacities from 26 to 147 cars. Completion of this project is expected by the end of the year.

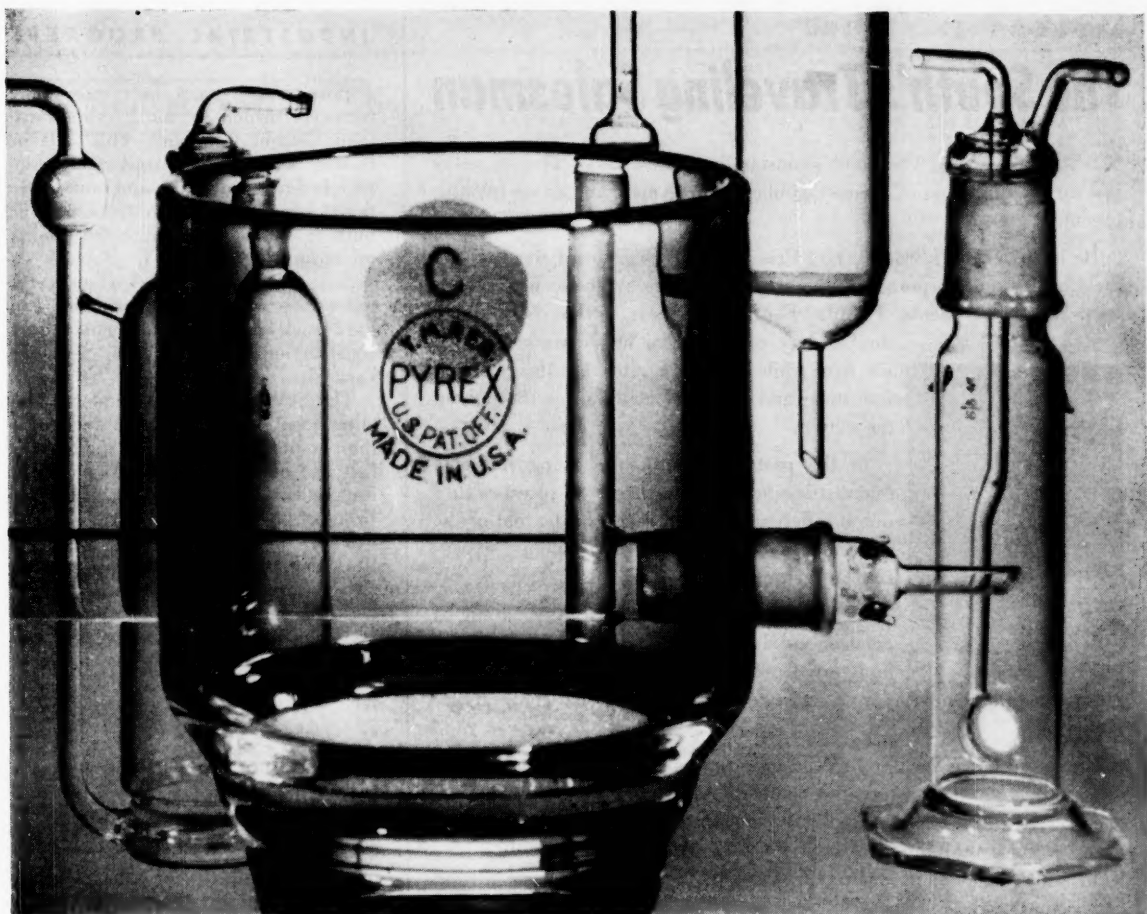
In the "hump" classification operation, loaded cars are pushed up an easy incline to the crest of a slight hill, or hump, from which they are allowed to roll by gravity down the "other side of the hump" onto pre-designated classification tracks according to their destinations.

During the operation the cars are electronically weighed while in motion and the weight of each automatically printed on a ticket by a machine in the scale room. The car is then routed by switches to its proper track. By this means, after an entire train has been classified, all cars in its length bound for any one common destination have been "sorted out" and set on one track together, ready for movement.

The yard will have radio communication between strategic points, illumination for night operation, and adequate standby power for emergency use.

In addition to construction of the new yard, the Seaboard also will





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3. Uniform porosity control in manufacture assures reproducible analytical results.
4. Dries quickly and conveniently to constant weight at 110°C.
5. Cleans quickly for re-use.
6. Lets you see filtration process.

You'll find the advantages for Gas Absorption, Gas Washing and Extraction on page 162 of the new Corning Catalog LP36.

To take the matter even further, we produce porosities in six classifications. These are Extra-Coarse, Coarse, Medium, Fine, Very Fine and Ultra Fine.

The purpose in presenting this digest of useful information is to suggest that you may be missing something if you

aren't using PYREX brand fritted ware. Easier going, faster, more accurate work and longer service are some of the rewards users of PYREX brand fritted ware enjoy as a matter of course. You can, too.

You'll also find information on applications, definitions of porosity, principal uses, proper care, operating pressures, thermal limitations and special apparatus, on pages 162 and 163 of our new catalog, LP36. If you don't have a copy we'll be glad to send you one.

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# The South's Traveling Salesman

DECATUR, ALA. The South's outstanding industrial spokesman today is a rare combination of chemist, public relations man, and administrative executive.

He is Dr. Frank J. Soday, Vice President and Director of Research, of the Chemstrand Corporation which operates huge synthetic fiber plants here and at Pensacola, Florida. For several years he has been doing double duty conducting a heavy work load for his firm while making a pitch for the South at industrial and technical conferences throughout the nation.



In the past 18 months the flying Alabama scientist-businessman has made 36 speeches in a dozen different states. In each case he told of the unparalleled opportunities for economic expansion in the South.

As president of the Southern Association of Science and Industry, Soday has addressed the Southern Governors' Conference twice and has represented the region before a variety of important national and regional groups.

His schedule has included recent appearances before the Industrial Research Institute in Houston; the Southern Association of State Planning and Development Agencies in Chattanooga; the Controllors Institute of America in Mississippi; the Atomic Forum in Atlanta; the Council of State Governments in Charleston; and the American Society of Civil Engineers in Knoxville.

During the next few weeks Dr. Soday will describe the South's bright future for the American Chemical Society in New Orleans; the State Academy of Science in New York; and the Southern Industrial Development Council in Mississippi.

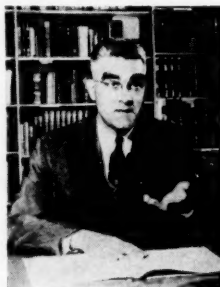
Those who have heard Soday agree that he is one of the most effective spokesmen the South has had. His fact-laden reports reflect his outstanding technical and administrative background.

Before joining Chemstrand, Soday held top technical positions with Lion Oil Co. in Arkansas; for Devoe & Raynolds in Kentucky; and for Copolymer Corporation in Louisiana. One of his responsibilities was the direction of the Rubber Reserve Tire Testing Fleet at San Antonio.



Soday, despite his many business activities, has found time to obtain more than 130 U. S. patents, mostly in the field of petrochemicals. During the past year he received the Herty Award for his achievements in chemistry.

To those who know him, Dr. Soday is the embodiment of "the new South." Certainly he is an important regional asset.



## INDUSTRIAL PROGRESS

acquire a spur track four miles long formerly owned by the Florida Portland Cement Company. This will be re-laid with heavier rail and completely rehabilitated, and an additional two miles of spur track will be built to extend this line to the mining operations.

Still another spur track about three miles long will be laid to serve a new hard rock crushing plant now under construction north of the Seaboard yard site.

The Seaboard also has underway at other locations at this time additional improvements designed to maintain a fast and efficient transportation service for traffic moving to and from the Brooksville area.

They include extension of pass tracks at Drexel and Ayers; installation of a modern traffic control system between Sulphur Springs and Gary and rearrangement of tracks and switches at Gary; and construction of additional yard tracks on Seddon Island at Tampa.

### Texas Firm To Build \$3 Million Drill Rig

LONGVIEW, TEXAS. R. G. LeTournau, Inc., has recently signed to build a \$3¼ million offshore drilling platform for Zapata Off-Shore Company of Houston. Delivery is scheduled for early 1957.

The portable drilling platform is the second to be built by LeTournau, and will incorporate a number of improvements.

The deck will be 194 feet long and 152 feet wide, or well over half an acre in area. Located here will be housing accommodations for a 45-man crew, areas for storing drill pipe and other supplies, two deck-mounted revolving cranes with 300-foot-ton capacities and 80-foot booms, and three anchor windlasses.

### Roanoke Utility Plans \$20 Million Project

ROANOKE. The Appalachian Electric Power Company has announced it is going through with the long-debated Smith Mountain Dam project at an estimated cost of \$20 million. An application was filed with the Federal Power Commission immediately for a preliminary permit for the dam and a hydroelectric power plant of at least 60,000-kilowatt capacity.

## PROGRESS NOTES

► **ATLANTA.** Clement A. Evans & Company, has announced the opening of a new branch in Orlando, Florida. The office, which is to be located in the Rutland Building, is to be managed by H. James Wheeler.

► **BIRMINGHAM.** Construction of new facilities for the manufacture of "Nitramon," a blasting agent, is now under way at the Birmingham works of E. I. duPont, located at Watson. Scheduled for fall completion, it is predicted that the operation will bring about a 10 percent increase in the current work force.

► **PENSACOLA.** St. Regis Paper Company has started work on a \$1.5 million pulp processing facility near Pensacola, Florida. When completed, it will process 300,000 tons of pulp a week.

► **TOCCOA, GA.** Le Tourneau-Westinghouse Company will invest \$1.5 million in expansion of facilities at its plant here. The Toccoa expansion is a part of a \$9 million program just announced by M. R. Yontz, LeTourneau-Westinghouse president.

► **PORT NECHES, TEX.** A multi-million dollar expansion program to increase the output of the world's largest butadiene plant in Port Neches, Texas, by 50 percent to 300,000 short tons annually was announced recently by William P. Gee, president of Texas-U. S. Chemical Company. The company is jointly owned by The Texas Company and the United States Rubber Company.

► **WINSTON-SALEM, N.C.** In a precedent-setting action, the Interstate Commerce Commission has given Hennis Freight Lines permission to lift its "gateway" restriction at Greensboro, N.C., and Delphos, Ohio. Until the ICC amended its restrictions, all shipments originating in the southern area have had to be channeled through Greensboro, N.C., and similarly, those originating in the northern area have had to be channeled through Delphos, Ohio.

► **WILMINGTON, DEL.** Hercules Powder Company's two new tall oil fractionation plants at Franklin, Virginia and Savannah, Georgia, are expected to yield 115 million pounds of rosin and fatty acids out of the 140 million pounds of raw material processed a year.



"HI - YOU BLANKETY-BLANK! OLD SO AND SO, - NICE, NEW SOUNDPROOF OFFICE YOU HAVE THERE!"

► **ATLANTA.** Southeast warehouse facilities for the Organic Chemicals products of the Dewey and Almy Chemical Company Division of W. R. Grace & Company have been set up here.

► **DECATUR, GA.** Southeastern Stainless Company has opened a new plant here, and plans to manufacture fasteners of all types, pipe and tube, pipe and tube fittings, sanitary fittings, valves, sheet, bar, and cable, wire, etc.

► **RICHMOND, VA.** Reynolds Metals Company is considering a site in Arkansas if it can obtain enough natural gas at a "reasonable" price in that state. The prospective expansion will be "no less than 200 million pounds a year" and will consist of expanding an existing reduction plant.

► **TAMPA, GA.** A Uniform Rental Service which will serve a 150 mile radius from Tampa with customized uniforms and work clothing has been opened here. The company has invested \$75,000 in equipment and facilities. The plant will employ 35 persons when full production is reached.

► **CHAMBLEE, GA.** The Diehl Manufacturing Company has opened a new southern district office and warehouse here. The

new facilities here will permit the maintenance of increased, well balanced stocks and will speed deliveries and service.

► **PASCAGOULA, MISS.** Construction of a \$10.7 million attack submarine is to begin at Ingalls Shipbuilding Corporation yards here early next year. W. R. Guest, Ingalls vice president, said construction will take three years with no additional employment involved.

► **KNOXVILLE.** The Foote Mineral Company of Philadelphia has announced plans for \$2 million in expanded facilities at its Electromanganese Division here. Construction of the addition began immediately and will be completed in early 1958. The new facilities will increase production from about 15 million pounds of electrolytic manganese annually to about 22 million pounds.

► **STANLEYTOWN, VA.** Major expansion amounting to over \$2.7 million will result in employment of 500 additional workers by Stanley Furniture Company here. The expansion will bring the payroll up to more than 1,300. Completion of the addition is slated for May 1957.

► **HOUSTON, TEX.** Snelling Manufacturing Company has made an outlay of \$750,000 in a new steel building and equipment for manufacturing water coolers.

► **BALTIMORE.** The Glidden Company has authorized immediate construction of additions to its plant here which will quadruple its capacity by 1957. Glidden's original plans called for completion of this expansion by 1960 at an estimated cost of \$30 million. However, the results achieved in the plant's initial operations this month led to the decision to accelerate completion of the project.

► **ANDERSON, S.C.** Owens-Corning Fiberglass Corporation will begin immediately a major expansion of its plant here. The new facilities, which are expected to be completed by the middle of 1957, will increase the plant's output by 50 percent.

► **TAMPA.** Master Packaging, Inc., printers and converters of cellophane and polyethylene bags and sheets, were scheduled to begin production in their new plant here about September 1. The plant will employ 30 to 40 persons when full production is reached.

► **MONROE, LA.** Three industries have started operations or announced they will locate here thus far this year. Ouachita Fertilizer and Chemical Company is now pro-

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# RYERSON



## INDUSTRIAL PROGRESS

ducing liquid fertilizer; Edgewood Products Corporation has completed its building in the Monroe Industrial District, and negotiations have been completed with a third undisclosed industry.

► **GREENVILLE, TEXAS.** Temco Aircraft Corporation is beginning two projects which will add \$940,000 worth of improvements to facilities used by the firm at their plant here. These improvements will include the construction of an extension to the present production building and also a lengthening of runways so that jet aircraft can be accommodated.

► **DORAVILLE, GA.** Construction of a new-type warehouse and zone office for the Chevrolet division of General Motors Corporation here is scheduled to start soon. Although no cost figure was given, construction men in Atlanta estimate that such a building could be valued between \$2 and \$3 million including land.

► **DALLAS.** Master Tank & Welding Company, manufacturers of LPG tanks, truck tanks and other pressure vessels, has announced the construction of a new plant in Quincy, Illinois. Production was scheduled to begin August 1.

► **CENTER, TEXAS.** Atlas Plywood Corporation's big flush door and plywood plant here, has just marked its second year of full operation by shipping its 1 millionth flush door.

► **LOUISVILLE.** Manufacturing growth in Kentucky during the first six months of this year was well in front of the 1955 rate of gain and may have established a half-year record for new jobs. A joint release by the Kentucky Chamber of Commerce and State Department of Economic Development said 47 new manufacturing plants began operations or announced plans to locate in Kentucky between January 1 and June 30. These new plants will create more than 6,500 jobs and have annual payrolls estimated at \$23 million. New factory employees for the entire year of 1955 totaled about 8,000.

► **ATLANTA.** Ford Motor Company has confirmed plans for a major expansion program at Hapeville, Ga. The \$14 million expansion is scheduled to be completed late in 1958 and will add 407,000 square feet to its existing plant.

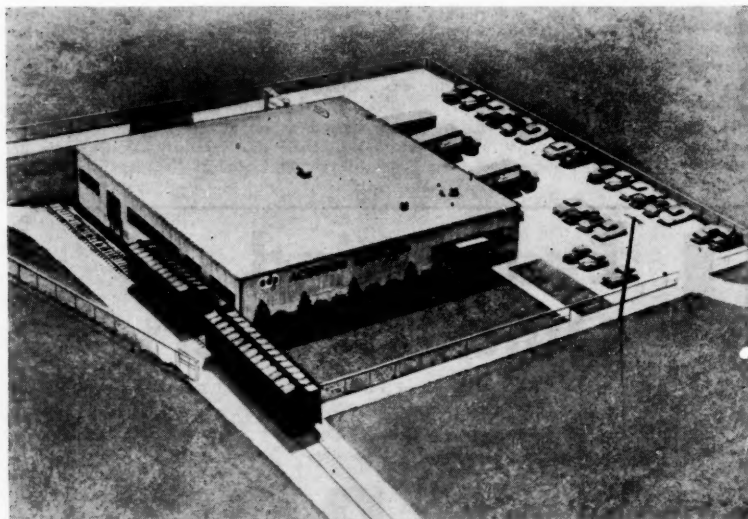
► **NORMAN, OKLA.** An all-time record in general business activity was established during June in Oklahoma, and 1956 now promises to be the best year in history, according to the University of Oklahoma bureau of business research. Business surged to 8.9 percent above the May total, and 17.6 percent higher than June of last year.

► **BAINBRIDGE, GA.** The Georgia Ports Authority has ordered construction of a controversial inland port here and has announced first moves toward expanding Brunswick's docks. Engineers have been ordered to "select a site and proceed with construction plans" at Bainbridge, the authority said.

► **NORFOLK.** Foreign commerce tonnage figures for the Ports of Virginia climbed 70 percent during the first quarter of 1956, according to the Virginia State Ports Authority. Hampton Roads recorded 10.9 million tons during these three months while the State's total amounted to a little more than 11 million tons of bulk and general cargo.

► **TAMPA.** A \$400,000 grain elevator and unloading facility has been completed in Tampa harbor by River-Gulf Terminal, Inc., to expedite unloading, handling and storage of grain from the midwest.

► **ATLANTA.** With 34 expansions by established manufacturers and 53 new plants either announced or started during the first six months of this year, Georgia achieves another all-time record in industrial advancement. It is estimated that new plants alone will provide 4,700 additional jobs and upward of \$20 million more in payrolls, with plant expansions adding more to the total.



Aerial view of Acheson Dispersed Pigment Company's recently erected Orange, Texas plant, considered to be the most modern facility in the world for dispersed pigment manufacture. Economies afforded by process improvements here are a contributing factor in a major downward price change for pigment dispersions.

## New Plant Summary

The following is a summary of major industrial plants reported to the **RECORD** during the month of July, 1956. This information has been checked with the Southern Association of Science and Industry and various state development agencies.

Number of employees is indicated by the code: A (under 25); B (25-100); C (100-250); D (250-1000); and E (over 1000).

### ALABAMA

Seima—Alabama Metallurgical Corp., commercial magnesium. E. Howard Perkins, Pres., Brooks and Perkins, Inc. (Detroit). Operation to begin 1957. \$7 million. (D).

Sheffield—Tennessee Paper Mill Co. plans \$25 million paperboard mill.

### ARKANSAS

Boonville—Ace Comb Co. (Subs. American Hard Rubber Co., New York), rubber combs. In operation.

Brinkley—Phillips Jones Corp. (New York), shirts. In operation. (D).

Camden—Villa Mobile Homes Mfg. Corp., F. L. Cappaert, Pres., auto trailers. (B).

Cotter—Missouri Charcoal Fuel Corp. (Jefferson City, Mo.), M. O. Raine, Vice Pres., charcoal briquets. \$100,000. (B).

Fert Smith—Eastern Metal Products Corp. (Tuckahoe, N. Y.), electrical household appliances. In operation.

Monticello—Root Manufacturing Co., power mowers. In operation.

Rogers—Wendt-Sonis Co. (Hannibal, Mo.), grinding tools. In operation.

Searcy—Frostyale for Frozen Foods, Inc., James Thomas, Pres., frozen fruits and vegetables. \$200,000.

Sheridan—Sheridan Mfg. Co., Jack Russell, Pres., furniture. \$65,000. In operation. (B).

### FLORIDA

Apalachicola—Gulf Menhaden Fisheries, Inc., seafood processing. (C).

Cedar Key—Cedar Key Seafoods Co., canning crabs. (B).

Dunedin—General Nuclear Engineering Corp., engineering and development on nuclear reactors. (B).

Ft. Lauderdale—Ranco, Inc., engineering. (B).

Ft. Lauderdale—Gold Coast Cabinet Co., kitchen cabinets. (B).

Lake City—Guerdon Industries, Inc., mobile homes. (C).

Miami—Bayroad Mfg. Co., electronic equipment, metal working. (C).

Miami area—International Shipbuilding Corp., boats. (D).

Naples—Brass-Martin Enterprises, plastic compound for boats, roads, roofs. (B).

Orlando—Aerojet General Corp., architect-engineer services. (B).

Pensacola area—National Metals Corp., zirconium and hafnium refining. (C).

Pensacola—National Research Corp. (Cambridge, Mass.). \$25 million.

Pensacola area—St. Regis Paper Co., bleached pulp and paperboard. \$1.5 million.

St. Petersburg—Minneapolis-Honeywell Co., Paul E. Wishart, Pres., automatic control instruments. Completion est. 1957. (E).



## INDUSTRIAL PROGRESS

Tampa—American Can Co. (New York 17), tin mill. \$multi-million.

Tampa—Master Packaging, Inc., printers and converters of cellophane and polyethylene bags and sheets. (B).

### GEORGIA

Americus—Turner Mfg. Co., peanut-picking machines. In operation.

Athens—Westinghouse Electric Corp., transformers. (E).

Atlanta—Atlanta Paper Packaging Machinery Co. \$300,000. (B).

Atlanta—Capital Steel Corp., steel products.

Atlanta—Greyshaw Co., toys. \$100,000. (B).

Atlanta—Oscar Mayer & Co. (Madison, Wisconsin), Oscar G. Mayer, Jr., Pres., sausage. In operation.

Atlanta—Pillowtex Corp., Leonard Aronson, General Mgr., pillows. Construction to begin Fall, 1956. \$150,000. (B).

Atlanta—Triangle Aluminum Products Co., Frank Rosendahl, Pres., aluminum and glass jalousies. In operation.

Atlanta—Zep Mfg. Corp., Mandle Zaban, Pres., sanitary and maintenance chemicals. \$750,000.

Chamblee—John W. Eshelman and Sons, feeds. \$1 million.

Macon—Weston and Brooker Co., W. S. Weston, Jr., Pres., stone crushing. \$multi-million. (B).

Social Circle—Venus Textile Co., textiles. (C).

Vidalia—Hazelhurst Mfg. Co., apparel. \$160,000. (C).

### KENTUCKY

Louisville—Ralston Purina Company (St. Louis).

### LOUISIANA

Donaldsonville—Louisiana Humus Co. \$600,000.

Lake Charles—Foster Wheeler Corp. (New York), chemicals. \$12 million.

### MARYLAND

Baltimore—American Can Co. (New York 17), tin mill. \$multi-million.

Baltimore—Baltimore Tube Bending Co., 630 Brice St.

Mechanicsville—Hunter Mfg. Corp., ordinance parts.



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### MISSISSIPPI

Ellisville—Movie Star, Inc., lingerie. (C).

Hattiesburg—Price Brothers Co., prestressed concrete pipe. (C).

Warren County—Mississippi Valley Portland Cement Co. plans \$3.8 million cement plant.

### NORTH CAROLINA

Aberdeen—Olin Mathieson Chemical Co., chemicals.

Chadbourne—Chadbourne Mfg. Co., apparel. (C).

Goldsboro—Bonitz Insulating Co., insulation. (B).

Hickory—Hickory Elastic Yarn Corp., rubber yarn.

High Point—Style House, Inc., furniture. (B).

Lenoir—Mobile Manor Corp., trailers. (B).

Lexington—Mid State Tile Co., tile. (B).

Lumberton—Augusta Knitting Corp. (Utica, N. Y.), knitwear. In operation.

Old Fort—Southern Industries, paper products.

Pilot Mountain—Carolina Poultry Farms, Inc., food and kindred items. (C).

Robbinsville—Fontana Mills. (Subs. James Lees & Sons, Inc.), Norman Dawson, Jr., Mgr., rugs. (C).

Sharpsburg—Perry Lumber Co., lumber and wood products. (B).

Statesville—Dolen Mfg. Co., apparel. (B).

Thomasville—Kayby Hosiery Mills of N. C., Inc. (D).

Weldon—Riverside Mfg. Co., lumber and wood products. (B).

Winston Salem—Sovelco Mills, Inc., textile. (C).

### OKLAHOMA

Muskogee—Container Corp. plans \$1.5 million plant.

### SOUTH CAROLINA

Charleston—American Sugar Refining Co. (New York). \$2.25 million.

Leesville—J. B. Martin Co., velvet and narrow fabrics. \$500,000. (B).

Van Wyck—Bowater Paper Co. have \$50 million pulp and paper mill under consideration.

### TENNESSEE

Counce—Tennessee River Paper Co. has purchased site for paper mill.

Knoxville—Knoxville Concrete Pipe Co., concrete pipe. Thomas G. Johnson, Pres.

Michie—Standard Seating and Mfg. Co. (Memphis), school desks, pews. In operation. (C).

Murfreesboro—General Electric Co., fractional horsepower motors. \$multi-million. (D).

Nashville—Nashville Concrete Pipe Co., Earl Webber, Pres., concrete pipe. Construction began July, 1956. (B).

Rockwood—Tenn. Products & Chemical Corp., ferromanganese.

Scotts Hill—Columbia Garment Co. (Columbia, Tenn.), A. H. Warner, Pres., children's apparel. (B).

### TEXAS

Houston—American Can Co. (New York 17), tin mill. \$multi-million.

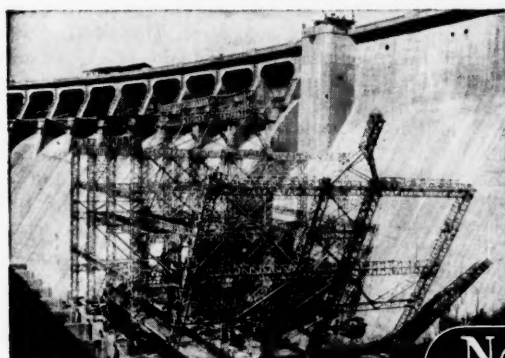
Houston—Celanese Corp. (New York 16), chemicals.

Houston—Jones and Laughlin Steel Corp. (Pittsburgh 30), steel mill. \$250 million.

Houston—Kellogg Company, chemicals.

### VIRGINIA

Newell—Koppers Co. have under consideration \$1 million chemical plant.



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## RESEARCH



Claude R. Daum, U.S.G.S.; Dr. Buell Beadle, Southwest Research Institute; Robert Cruse, Southwest Research Institute; Dr. Russell Dressler, Southwest Research Institute; and Gordon E. Koberg, U.S.G.S., examine an automatic wind measuring device before locating it on a raft on a 3.5 acre lake to study evaporation losses.

## Thin Chemical Film Promises To Save Water Lost In Reservoir Evaporation

SAN ANTONIO. A thin chemical film one ten millionth of an inch thick may be the means of solving one of the country's basic water problems, the loss through reservoir evaporation.

Southwest Research Institute's Department of Chemistry and Chemical Engineering is working on the use of monolayers as a means of reducing evaporation loss. The project is sponsored by a group of Texans who formed the Southwest Cooperative Research Project on Reservoir Evaporation Control which has raised over \$25,000 for the program.

Texans are especially conscious of this water loss. They use 8 million acre feet a year and their net loss through evaporation is 7.5 million acre feet. Water districts estimate the cost of water at \$30—\$80 per acre foot.

The use of monomolecular films as a means of cutting water evaporation was suggested in this country in 1925, but no field experiments were done until 1952. These took place in Australia and were conducted by Aus-

tralian government scientist, W. W. Mansfield.

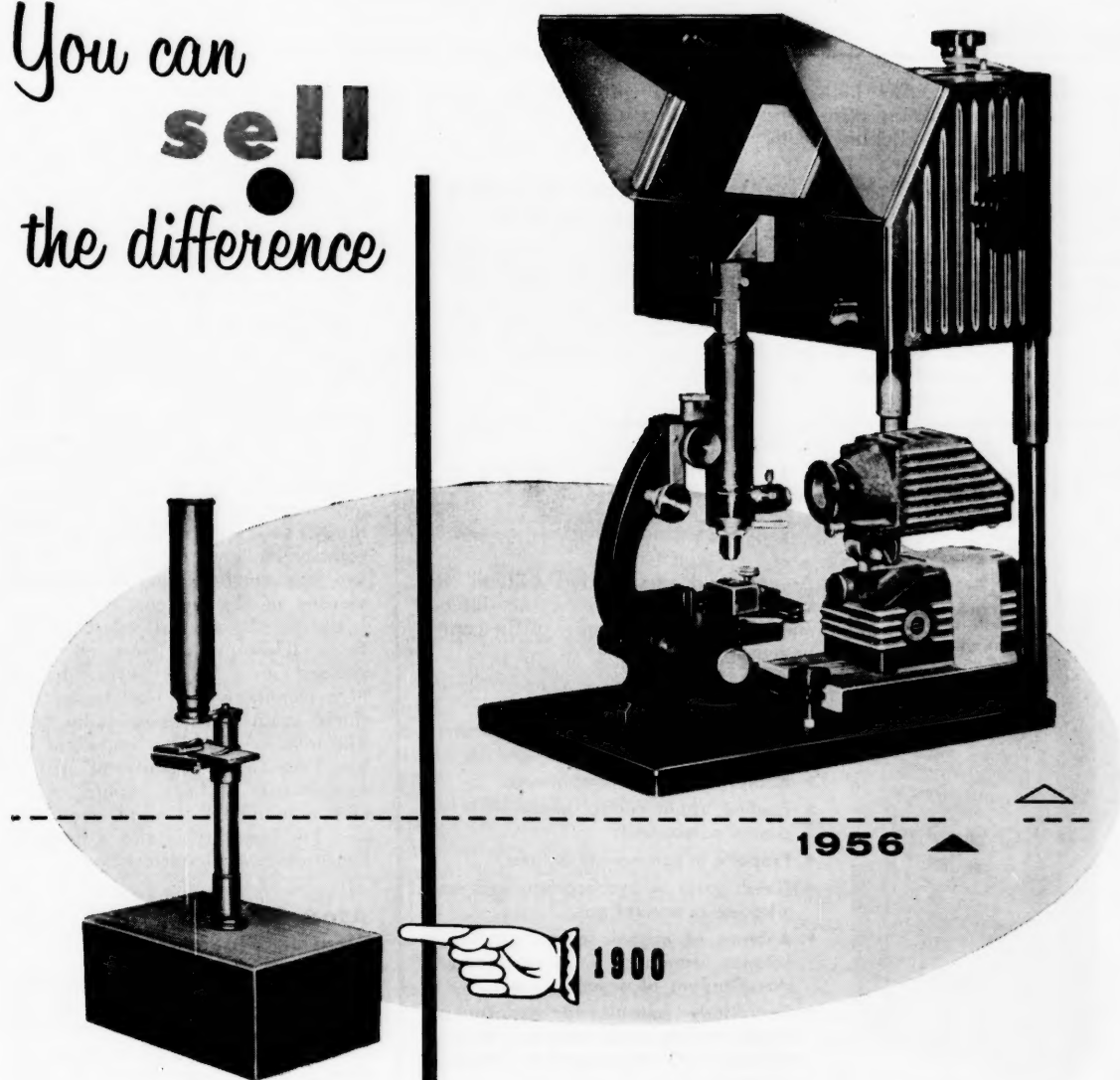
Mansfield said that hexadecanol (a fatty substance used in cosmetics) cut down evaporation as much as 45%. He stated that the substance was harmless to fish, animals and plant life.

Southwest Research Institute officials and the sponsoring group led by Colonel E. V. Spence set up the first international conference on reservoir evaporation control. The meeting was held in San Antonio in April and was attended by representatives from across the United States and Mexico.

Mansfield was flown in from Australia for the conference and remained to consult with the Institute staff.

SwRI scientists screened over 100 chemicals as possible films. They have used hexadecanol coating films on stock tanks and are currently using it on a 3½ acre lake. The lake has an evaporation profile determined by the U. S. Geological Survey from Denver so results before and after the

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## RESEARCH

film can be tested. The biological studies of the material are being conducted by the U. S. Public Health Laboratories in Cincinnati.

The films are applied by floating rafts which have the material in screened boxes and which will replenish the film when needed. The material spreads quickly across the surface. The scientists are checking the effect of dust, wind and waves on the films and if Mansfield's findings hold true for the Southwest, they

will have provided the means of eliminating one of the causes of the water problem.

### West Virginia Selected For Astronomy Unit

GREEN BANK, W. VA. Subject to zoning and other arrangements, a site near here has been selected for a new radio astronomy facility to be sponsored by the National Science Foundation.

Green Bank is in Pocahontas County, in the mountains of southeastern West Virginia, about 35 miles south of Elkins. It was selected over 29 other sites after intensive review covering a wide area in the eastern part of the United States.

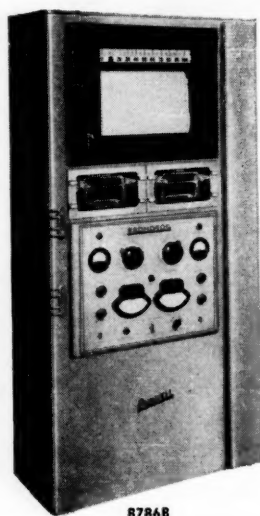
The site was recommended in a study by Associated Universities, Inc., conducted for the National Science Foundation to determine what form the radio astronomy facility should take, where it should be located.

Site requirements for a radio telescope are extremely stringent. The primary one is an absolute minimum of radio noise or interference on wave lengths below ten meters, and this requirement has limited the search to thinly populated areas away from commercial air routes. A southerly site was sought to permit maximum viewing of the heavens.

Unlike the optical telescope, the radio telescope is most effectively situated in a valley surrounded by high mountains that tend to act as a shield against extraneous radio noise. The weather is another important factor. Because the instrument will be unsheltered, the site should experience a minimum of wind, snow, and ice; low humidity is also a desirable meteorological characteristic.

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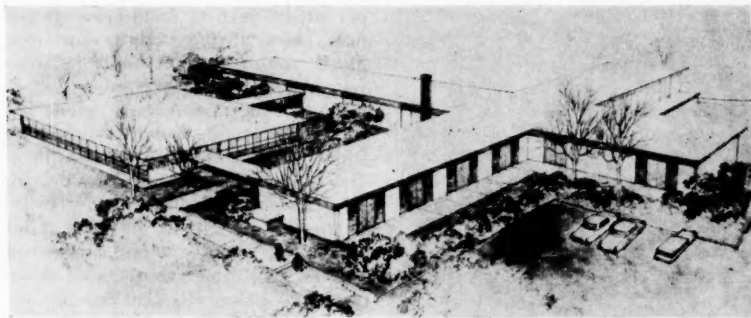
### Atom Scientist Starts Firm In Florida

ST. PETERSBURG, FLA. Another important nuclear research and development facility is to be added in the South, according to an announcement here by Doctor Walter H. Zinn. An outstanding nuclear scientist, Zinn heads a new company, General Nuclear Engineering Corporation, which will locate in this area.

According to the report, Zinn's company will begin operations here in a small plant which will accommodate about twenty-five scientific workers. The new unit will offer services in the design of nuclear power plants, research reactors, and special purpose reactors.

Commenting on his decision to locate here, Zinn said that Florida has a rapidly expanding need for electrical energy, and is one of the higher cost fuel areas of the country. In time, he said, Florida "will become one of the principal users of nuclear energy in the generation of electrical power."





Architect's sketch of new \$750,000 research laboratory being built in San Antonio for the U.S. Army Ordnance Corp. The new installation, to be staffed by Southwest Research engineers, will investigate fuels and lubricants.

## Pratt And Whitney Reveals Plans For New \$600,000 Lab In San Antonio

SAN ANTONIO. This south Texas city's bid to become a major research center is paying off in a big way. This fact was underscored by an announcement that Pratt and Whitney will build a \$600,000 lab here to study nuclear power units for aircraft.

The new "hot laboratory" will include two test cells, each capable of handling up to 100,000 curies of Cobalt 60, one of the most powerful sources of radiation known. The facility will be built into the side of a hill near Southwest Research Institute.

Meanwhile, groundbreaking ceremonies have been held for the new \$750,000 laboratory being built here for the U. S. Army Ordnance Corp. Plans for this installation, to be engaged in research on fuels and lubricants, were announced earlier in the summer.

Upon completion, the new ordnance laboratory will be staffed and managed by Southwest Research engineers and technicians, who will have the responsibility of developing and testing fuels and lubricants adequate to meet the needs of new types of weapons and other Ordnance equipment, many of which are still on drawing boards.

"This is the first of the outside laboratories to set up research facilities at Southwest Research Institute," said President Harold Vagtberg. "It marks a big step in further development of San Antonio as a center of research."

The new research laboratory and

equipment will be housed in two buildings, one of which will be used for dynamometer and related facilities for engine research on fuels and lubricants, while the other will be employed for offices and special laboratories.

Connecting with it by covered walks will be the adjacent stucco and glass office building which will cover 4300 square feet. In addition to offices, the building will also contain a bench test laboratory, an analytical laboratory, and an inspection laboratory. It will be of lift-slab construction, a building method developed at the San Antonio research center.

The new Ordnance laboratory will be located on approximately three acres of ground leased to the government, adjacent to Southwest Research Institute's Automotive Road Test Laboratory, largest research facility in the country designed exclusively for research, development, and evaluation of automotive petroleum products and related items in which automotive vehicles are used as research tools.

### Virginia Research Firm Gets Rocket Contract

ALEXANDRIA, VA. Atlanta Research Corporation here has been awarded a subcontract by the Martin Company, Baltimore, to provide the small solid propellant rockets that will be used as power units to spin-stabilize the third stage of the Earth satellite

launching vehicle and to separate the burnt-out second stage rocket shell from the third stage-satellite assembly.

The third-stage launch rocket, with its "payload" of the instrumented satellite, is kept on course during its operation through the gyroscopic forces produced by spinning it. Conventional tail fins have no air to push against and thus produce no stabilizing effect above the earth's atmosphere, where the third stage rocket of the launching vehicle is designed to operate. Accuracy in launching the satellite in the most favorable orbit will directly affect its globe-circling "life".

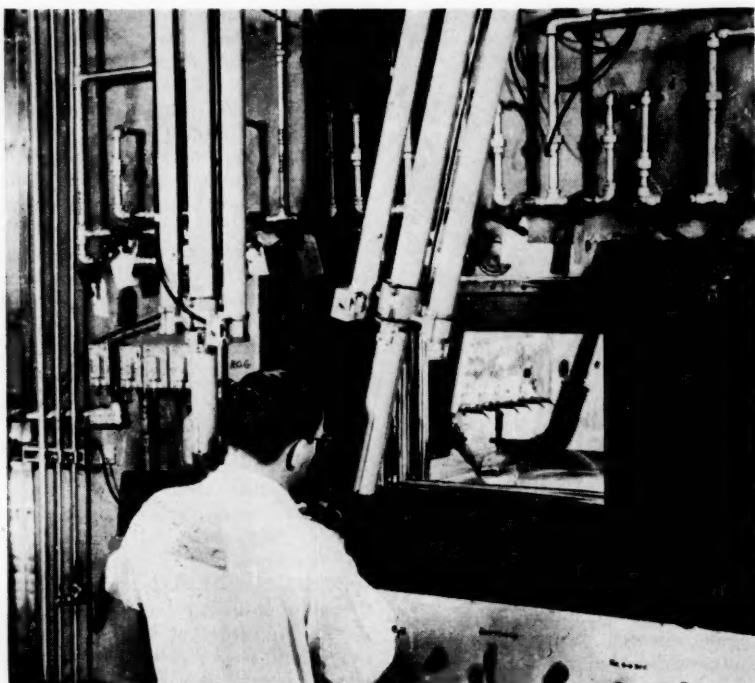
Dr. Arch C. Scurlock, president of Atlantic Research Corporation, announced that engineering project work has been started in the company's Alexandria laboratories for the development and testing of the solid propellant rockets to be used for the spin and stage separation functions. The project is being conducted by Atlantic Research's Chemistry Division, under the direction of Dr. Lester L. Weil, division director. Mr. J. N. Rossen has been designated project engineer.

### Missile Science Group Plans Florida Office

ORLANDO. The South's increasing importance in the development and production of missiles and components has again been emphasized by the decision of Aerojet General Corporation to locate an engineering office here. Aerojet, a subsidiary of General Tire and Rubber Company, is a leader in the development of rocket engines, components, and airborne electronics apparatus.

The new Orlando office will evidently provide services related to missile tests conducted at nearby Patrick Air Force Base on the Florida East Coast. Several other technological firms have located in Orlando in recent months. These include Girdler Company, Johnson Electronics, Combustion Engineering, Radiation, Inc., and Systems, Inc.

According to Milton Blanck, Manager of the Orlando Industrial Board, about 25 architects and engineers will be included in the original staff here for Aerojet. Annual payroll will be about \$250,000.



The second large cesium source produced by Oak Ridge National Laboratory was completed in the remote-control cell shown above. This new 2000-curie cesium-137 gamma ray source will be used in a fission product utilization program.

## Huge New Long-Life Radiation Source Produced At Oak Ridge National Lab

OAK RIDGE. Completion of a 2000-curie cesium-137 gamma ray source was recently announced by Arthur F. Rupp, Director of the Operations Division at Oak Ridge National Laboratory, here. This is the second large cesium-137 source to be produced at the Laboratory, which is operated by Union Carbide Nuclear Company, a Division of Union Carbide and Carbon Corporation for the Atomic Energy Commission.

The first source, which contained 1540 curies of cesium-137, was completed in 1954 and is now in use for medical research at the Oak Ridge Institute of Nuclear Studies. The second source will be used in a fission-product utilization program at the University of Michigan.

Cesium-137 is the most important long-lived (about 30 years) gamma ray-emitting isotope found in the by-

products of nuclear fission. It is expected that, in addition to the well-known medical applications, millions of curies will be used by industry in the future for radiography, pasteurization of foods and drugs, and catalyzing chemical reactions.

The 2000-curie source of cesium-137 was 3.18 centimeters (1.25 inches) in diameter and 3.75 centimeters (1.47 inches) high, weighing 91 grams (3.21 ounces) and occupying a volume of 29.65 cubic centimeters (1.81 cubic inches). The specific activity was 22.4 curies of cesium-137 per gram of cesium chloride (635 curies per ounce).

The radioactive cesium used in this source was chemically recovered from wastes resulting from the processing of reactor fuels and converted into dry cesium chloride powder. The powder was pressed at 20,000 pounds

per square inch to form compact pellets. Three of the pellets were combined to make the final radiation source by placing them in a double-walled, stainless steel container which was double-sealed to produce a leak-tight capsule.

A pilot plant, designed to provide large-scale testing of processes for separation of fission products from reactor wastes, is now under construction at Oak Ridge National Laboratory. This plant will also expedite the preparation of large radiation sources.

When placed in operation about June 1957, the plant will be capable of separating and packaging 200,000 curies per year of cesium-137.

In addition to cesium, large quantities of other fission products such as strontium-90, cerium-144, promethium-147, technetium-99, and ruthenium-106 will be separated in the plant. Sources containing thousands of curies of radioactivity can be prepared in a variety of shapes, such as long thin rods, flat plates, or hollow cylinders.

In all cases, the radioactive material will be hermetically sealed within double-walled, stainless steel containers to ensure against leakage.

When the new plant is placed in operation, it may be possible to effect a significant reduction in the price of cesium-137. The present price for large amounts of cesium-137 is about \$14 per curie, not including the fabrication and special handling charges. Data obtained from semi-works operations indicate that pilot plant material may be produced for less.

Although the current supply of cesium-137 and other fission products is limited, prospective users are encouraged to correspond with the Radioisotope Sales Department, Oak Ridge National Laboratory, Union Carbide Nuclear Company, P. O. Box P, Oak Ridge, Tennessee, for further details. Orders will be placed on file for future delivery of fission product radiochemicals.

### Tennessee To Study Radioactive Wastes

KNOXVILLE. The University of Tennessee has been awarded a \$10,000 contract by the Atomic Energy Commission to study vegetation grown in soil contaminated by radioactive wastes.

At the same time, U-T botanists will investigate the mineral needs of natu-

ral vegetation and how the plants return their minerals to the soil.

Investigators on the project, under Dr. Royal E. Shanks, will include Dr. L. F. Seatz, agronomist with the Agricultural Experiment Station, and John T. McGinnis, a graduate student in botany. Another researcher is expected to be appointed.

Dr. Fred H. Norris, U-T botanist, is in charge of the project now, while Dr. Shanks is spending the summer on another research project in Alaska.

The U-T team will compare uncultivated vegetation grown in soil contaminated by radioactive waste and similar wild plants found in a typical forest area. The work will be accomplished in cooperation with the Oak Ridge National Laboratory. Personnel of ORNL will advise and work with Dr. Shanks in certain phases of the study.

The AEC is interested in learning if radioactive contaminants have any tendency to become concentrated in specific plants, plant parts or the plant litter left after a plant dies in the autumn. Results of the U-T investigation will be added to the pool

of information being gathered by scientists all over the U. S. concerning the effects of radioactive wastes.

Safe disposal of these wastes from power reactors has been cited as one of the remaining obstacles to cutting costs of electricity produced by nuclear power to competitive levels. More information on the actual amount of contamination caused by "atomic garbage" will aid scientists in setting up proper safeguards.

### Redstone Arsenal Awards Rocket Study To U-T

KNOXVILLE. The Army's pre-flight testing of new rockets will be aided by basic research to be conducted at the University of Tennessee.

E. A. Whitehurst, acting associate director of the U-T Engineering Experiment Station, said a mechanical engineering team will analyze the gages which tell how well rockets are performing in their important wind-tunnel tests.

The research will be done for the Army's Redstone Arsenal under a con-

tract of approximately \$12,000, Whitehurst said.

Dr. Joel F. Bailey, head of the mechanical engineering department, and Professors R. L. Maxwell and P. F. Pasqua will conduct the research, analyzing instruments known as "strain gage balances." These instruments both support the rocket and measure forces acting on it in the air stream of the wind tunnel.

The control of the flight of new rockets is primarily determined in wind-tunnel tests, as at the Arnold Engineering Development Center at Tullahoma, Dr. Bailey pointed out.

### Aircraft Research Center Adds \$22 Million

TULLAHOMA, TENN. Further expansion of the Arnold Engineering Development Center here has been approved in the new military construction bill signed last month by President Eisenhower. An appropriation of \$22 million will provide for expansion of research on aircraft propulsion systems and jet engine components.

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## Lockheed Contracts For Nuclear Test Facility

MARIETTA, GA. Lockheed Aircraft Corporation's Georgia Division has announced selection of an architectural and engineering firm for the nuclear aircraft test facility to be built near Dawsonville, Ga. The firm also disclosed that General Electric will build reactors for the research center.

Announcement was made in April

that Lockheed will operate the facility for research and development in connection with the nuclear aircraft program of the United States Air Force.

The Vitro Engineering Corporation of New York will be responsible for design and engineering of all buildings, warehouses and access roads on the 10,000 acre site.

Richards and Associates of Carrollton, Ga., will construct the basic power supply and distribution sys-

tem for the research laboratories. This includes all transmission lines and necessary sub-stations. Amount of the contract is approximately \$176,000.

Work is to start immediately.

Two G.E. test reactors will be used by Lockheed scientists and technical research teams. Work on these is underway at General Electric.

The entire nuclear facility, to be constructed and operated for the U. S. Air Force by the Lockheed Aircraft Corporation's Georgia Division, is scheduled to be in operation by the latter part of 1957.

While construction is underway, training of scientific personnel will continue at Lockheed's Georgia Division and at the General Electric plant at San Jose, California.

Vitro personnel have established an office at Dawsonville.



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## First Supersonic Bomber To Fly Soon In Texas

WASHINGTON. The first bomber in the United States, and possibly in the world, designed to fly faster than sound will begin test flights soon in Texas.

General Nathan F. Twining, Air Force chief of staff, recently inspected the radical new aircraft on the production line at the Fort Worth plant of General Dynamics Corp.'s Convair Division.

The bomber is the B-58 Hustler, a delta or triangular winged craft after the fashion of the new F-102 interceptor plane. It is powered by four General Electric J-79 engines. These engines deliver an estimated 15,000 pounds of thrust apiece and are used in the new 1,400 mile-an-hour F-104 fighter plane.

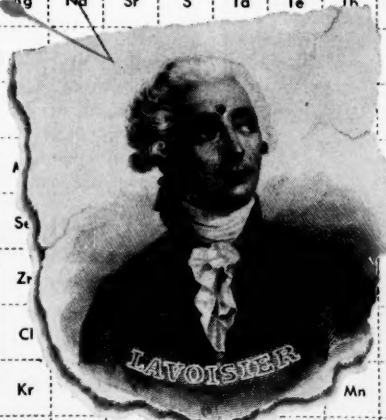

## Dallas Plant Receives New Missile Order

WASHINGTON. The Navy has announced the first production contract for Regulus II, a bigger, faster and longer range version of the missile of the same name.

The contract for \$12 million was awarded to Chance Vought, Inc., of Dallas.

The Regulus I already is carried by four cruisers, two submarines and four aircraft carriers.



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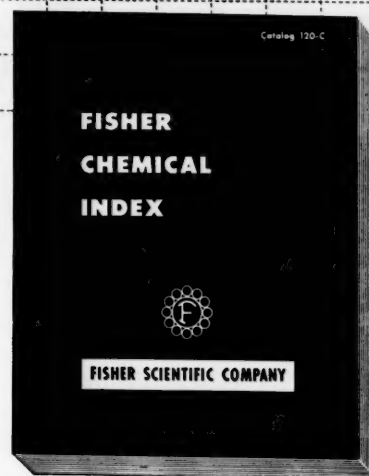
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New low-temperature porcelain enamel frits developed by Pemco Corporation are being successfully tested by a number of companies, according to Charles P. Lohman (center) Vice President in charge of sales for the Baltimore company. At Mr. Lohman's left is James B. Willis, Service Manager, supervising the use of these new enamels in the field and at his right, Dr. George H. Spencer-Strong, Head of the Pemco Research & Development Labs.

## Maryland Firm Introduces New Frits For Surface Coating Applications

BALTIMORE. Pemco Corporation is currently experimenting with three different low-temperature frits that can withstand temperatures to 1300 degrees.

Test run reports on all three frits is encouraging.

Of the three frits that Pemco has in production, two are overcoats, one for general purpose use for signs, architectural and general jobbing use where full strength and semi-pastel

colors are desired. The other overcoat is for stoves, refrigerator liners and exteriors, washing machine exteriors, signs and architectural.

The third low-temperature frit is a semi-opaque groundcoat for signs, architectural, general jobbing and one-coat single fire decorative or protective finishing work.

Since these new enamels can be used on products basically designed for organic finishes with little or no

changes, new markets have been opened up. Products that could not have a porcelain enamel finish before because of warpage or distortion can now have them. One new market is the room air conditioning field, where the exteriors of the units in porcelain enamel will protect them against moisture and other elements from their exposure outside the window. The casing that stays under cover in porcelain enamel will provide a scratch-proof, easy-to-clean surface.

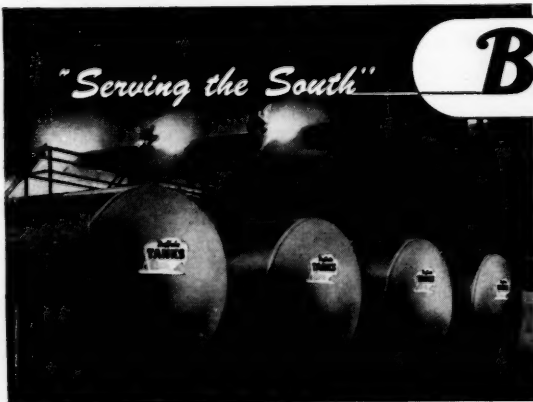
## New Plasticizer Unveiled By Tennessee Eastman

KINGSPORT, TENN. A new, primary, polymeric plasticizer was recently introduced to compounders of polyvinyl chloride by Eastman Chemical Products, Inc., here. According to company spokesmen, interest in the new plasticizer, designated Eastman Polymeric Plasticizer NP-10, centered around its unique combination of permanence properties coupled with its ease of processing into vinyl compounds and its low color.

Eastman's new polymeric plasticizer is the result of a lengthy research and development program built around a new glycol manufactured by Kodak's Texas Eastman division, neopentyl glycol.

## Memphis Firm Reports Aircraft Weight Device

MEMPHIS. Weight of airplanes and guided missiles and shifts in their centers of gravity are being determined on the ground by a combination lift-weighting device developed by Rotary Lift Company here. Craft can be positioned in almost any flight attitude of climb or dive and weighed up to 90,000 pounds with one-tenth of one percent accuracy.



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Sun Ray doubles output with new Pneuma-Serve screwdriver.

### Screw Feeder Speeds Output In Miami

MIAMI. Ever see a machine that swallowed screws and then spat them up fast enough to double a company's production average?

That's just what they have now at Sun Ray Chairs, Incorporated.

It used to be that employees were

in a constant state of unrest about their thumbs. Before the advent of the "screw-spitter", they had to give screws a twist with their fingers to get them started in the chair. Company officials investigated the problem and found that aside from the injured fingers, production was lagging behind what it could be.

It wasn't long before a solution was found. Soon a device, known as Pneuma-Serve, was discovered. It proved so popular that plant superintendent, Jerry Piccolo, looks upon the automated screw feeding equipment as one of the most important mechanical production aids which has ever come to his company's attention.

The operation which was causing so much trouble was the fastening of tapes to the tubular frames of aluminum furniture. All of the driving is performed in a downward position into holes which are pre-punched on what might be called the inside face of the frame. The woven Saran tapes are delivered to the work location with grommets in place, and one op-

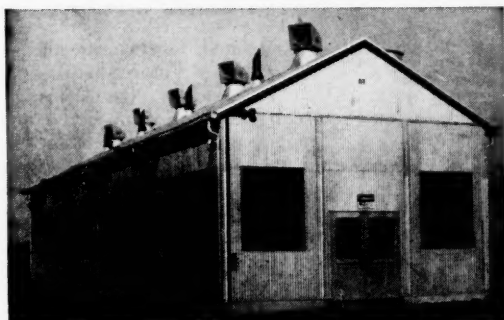
erator places all the tapes for each chair section.

Around the first of the year, when bandaged fingers were at a maximum, six Pneuma-Serves were introduced to the plant. They caught on immediately and now the company has forty such tools.

At present, there's not a taped thumb in the whole place. Not only is there no need to bundle up the thumbs now, but the previous practice of using awls to align the grommets with the punched holes prior to placing the screws has been scrapped.

Piccolo says that before the installation of Pneuma-Serve, the plant's production averaged 60 units per operator per day. Now with a total of 12 Pneuma-Serve equipped screw drivers handling all the tape fastening on chaises and stack chairs, production averages between 100 and 120 units per operator per day.

The company figures that the new equipment paid for itself in less than four months.



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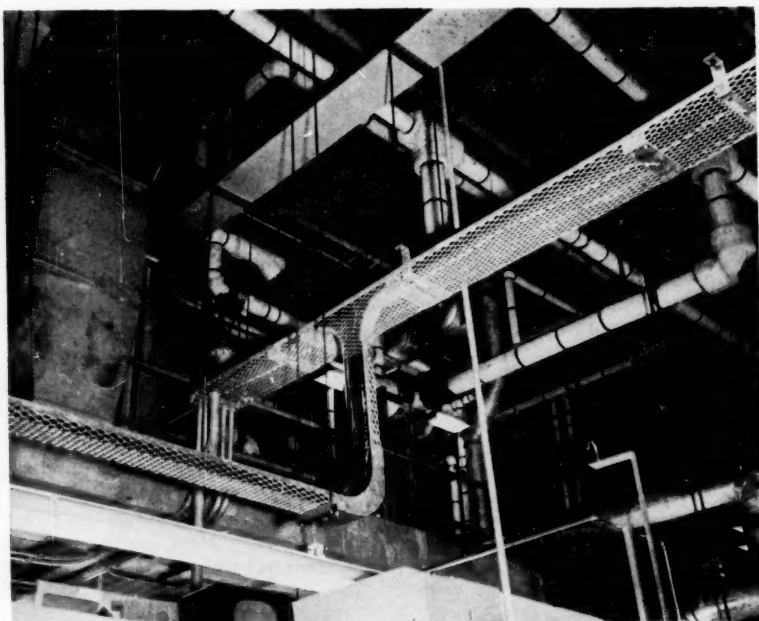
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### Cable System Offers Easy Accessibility

WAYNESBORO, VA. General Electric has adopted a new type of cable supporting system to support many miles of cable and still have direct accessibility to all of it. Under the new set-up, the rerouting of cables could be accomplished at a minimum of time, trouble, and cost. Distribution to all parts of the laboratory by means of expanded metal cable troughs provides quick access, higher current ratings, as well as lower initial cost through saving in both materials and labor.



### Uprights Missing From Modern Station

LAKE LAND, FLA. Prestressed and precast concrete, mass-produced in standardized forms made this unusual design of a local service station possible. These same forms will permit advanced architectural designing in warehousing, store buildings, schools, and industrial plants. The forms are manufactured by Leap Concrete, Inc., located here.

### Naval Stores Session Planned In Florida

The second Naval Stores Work Conference, sponsored by the Naval Stores Station, Southern Utilization Research Branch, Agricultural Research Service, and the Lake City Branch of the Southeastern Forest Experiment Station, Forest Service, U. S. Department of Agriculture, will be held Monday and Tuesday, October 8 and 9, at the Roosevelt Hotel in Jacksonville. This conference will feature talks by key men from the various naval stores producing and consuming industries. These speakers will discuss various factors affecting the production and utilization of naval stores products.

Two sessions will be held Monday, with a third session scheduled for Tuesday morning. The conference will close at noon the second day to provide an opportunity for those desiring to do so to visit the laboratories of the Agricultural Research Service and Forest Service at Olustee, Florida, on US Highway 90, about 50 miles west of Jacksonville.

### New Orleans Meet To Cover South's Future

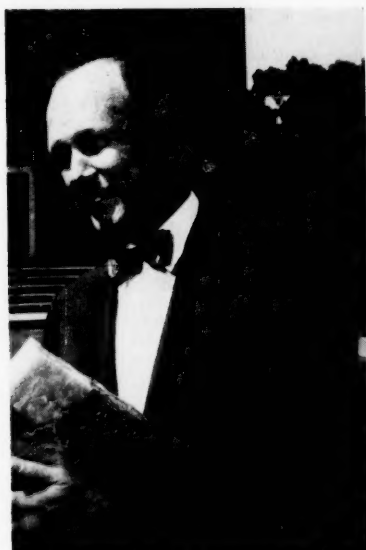
A national forum with the theme "The South's Future" will be held October 11-13 in New Orleans. The meeting which is planned for the 50th Anniversary Observance of the Louisiana Section of the American Chemical Society will bring together prominent members of industry, business leaders, outstanding educators, college and high school students. Members of other professional societies are invited to attend the meeting.

### AIDC Jackson Session To Hear Soday Report

JACKSON, MISS. Dr. Frank J. Soday, President of the Southern Association of Science and Industry, will be one of the feature speakers for the annual meeting of the Southern Industrial Development Council to convene here October 21-23.

The conference will afford an opportunity for leading developers from the southern states to exchange ideas concerning techniques for promoting further industrial progress in the region.





SRI's director, Dr. William Murray.

## Southern Research Report Shows 35% Increase

BIRMINGHAM. Release here last month of the Eleventh Annual Report of Southern Research Institute provides detailed information concerning the progress of the regional scientific institution.

According to SRI director, Dr. William Murray, the Institute handled a dollar volume of research of approximately 1.25 million for the past year. This was a 35 percent increase in industrial volume over the previous year, affecting some sixty different sponsors.

Murray reported that some thirty new members were added to the technical staff during the past year and some fifteen patents and technical papers resulted from research investigation.

The forty-four page annual report includes a directory of officers, trustees, and members of the Advisory Council.

### OTHER RELEASES

**Atoms and Energy**, by Prof. H. S. W. Massey, Philosophical Library, Inc., 15 E. 40th Street, New York 16, N. Y., 174 pp., \$4.75.

**Background of Atlantic Research Corp. and Current Facilities**, Policies, and Fields of Competence, Atlantic Research Corp., Alexandria, Va., 34 pp.

**Consumer Credit In An Expanding Economy**, University of North Carolina, School of Business Administration, Chapel Hill, North Carolina, 97 pp.

**Research by Cooperative Organizations**, The United States Govt. Printing Office, Washington, D. C., 47 pp.

**The Petroleum Refinery Engineer's Handbook**, by J. F. Strachan; was first written and privately published as a manual for the inspection staff of a major petroleum refinery; Philosophical Library, Inc., 15 East 40th Street, New York 16, N.Y., 168 pp., \$15.00.

**Education, Segregation and Suppression**, speech by Harry Mell Ayers, editor and publisher of *The Anniston Star*, an elaboration of a baccalaureate address at Troy State College, Troy, Ala., June 1956, 43 pp.

**Texas Industrial Expansion**; lists 39 new industrial plants announced during the second quarter of 1956; Texas Business News, Bureau of Business Research, Univ. of Texas, Austin 12, Texas.

**Save the Seed Corn**; a plea to support the South's graduate schools; Southern Regional Education Board, 881 Peachtree Street, N.E., Atlanta 9, Ga., 5 pp.

**How Much More Can We Stand?**, speech by Arthur A. Smith; increase in the legal minimum wage is destroying job opportunities; First National Bank in Dallas, Dallas, Texas, 7 pp.

**Industrial Market Research**, by Robert J. Kyle; management decisions based on analysis of facts rather than on hunches or intuition; The Research Engineer, Georgia

Tech Engineering Experiment Station, July, 1956, Atlanta, Ga. 20 pp.

**Patents on Light Weight Ceramics**, compiled and edited by A. J. Metzger, Dept. of Ceramic Engineering and Virginia Engineering Experiment Station, Blacksburg, Va., 69 pp.

**Electronics In Texas**, by James H. Keahey, Texas Business News, Bureau of Business Research, The Univ. of Texas, Austin 12, 11 pp.

**List of Publications and Patents of the Southern Utilization Research Branch**, Southern Utilization Research Branch, 1100 Robert E. Lee Boulevard, New Orleans 19, La., 27 pp.

**Southern Horizons**, speech by James F. Crist, annual convention, Printing Industry of the Carolinas—Blowing Rock, N.C., July 1956, 6 pp.

**Steel for the structures of America**; glance at the Allied Structural Steel Companies; 20 North Wacker Drive, Suite 1790, Chicago 6, Ill., 23 pp.

**The Mineral Industry of Tennessee in 1954**, United States Dept. of the Interior, Bureau of Mines, 4800 Forbes Street, Pittsburgh 13, Pa., 9 pp.

**The Mineral Industry of Kentucky in 1954**, United States Dept. of the Interior, Bureau of Mines, 4800 Forbes Street, Pittsburgh 13, Pa., 9 pp.

**Growth of Slash Pine Plantations on the George Walton Experimental Forest**, by Frank A. Bennett, Southeastern Forest Experiment Station, Asheville, North Carolina, 21 pp.

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PORT  
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FLORIDA

**Lewis M. Smith**—President of the Alabama Company, reappointed Chairman of the Committee on Commercial Uses of Atomic Energy of the Chamber of Commerce of the United States for the year 1956-57.

**Alex C. Kelly**—Manager of Atlantic Steel Company's Fabricating Division, named to the national Committee on Reinforced Concrete Research of the American Iron and Steel Institute.

**James R. Nolan**—appointed Manager of the research and development department of Fort Worth Steel and Machinery Company. Nolan was previously employed in Convair's Fort Worth division for seven years, working in product development.

**R. T. Thompson**—named to Commercial Solvents Corporation's expanding agricultural chemicals marketing and distribution organization. Thompson's sales responsibilities will be in Georgia and Alabama.

**Robert W. French**—resigns as vice-president of Tulane University to become director of the Port of New Orleans. French succeeds W. J. Amoss, who leaves New Orleans in September for an executive position abroad.

**Donald S. Kennedy**—president and chairman of the board of the Oklahoma Gas and Electric Co., elected president of the Edison Electric Institute, the nation's electric utility trade association. As president

of this group, Kennedy will be the electric industry's major spokesman.

**Loren D. Grubb**—named Regional Manager of Operations of Petroleum Chemicals, Inc., at Lake Charles. He will be in charge of all activity in the Lake Charles region of Louisiana for Petroleum Chemicals, which is owned jointly by Continental and Cities Service.

**William Prescott**—appointed chief analytical chemist of American Cyanamid's Fortier plant, according to plant manager, C. F. Bonnet.

**E. A. Whitehurst**—Director of the Tennessee Highway Research Program at the University of Tennessee, named Associate Director of the U-T's Engineering Experiment station.

**Robert N. Hoskins**—promoted to General Forestry Agent for the Seaboard Air Line Railroad, according to Warren T. White, assistant vice president in charge of industrial development.

**Wayne W. Wolford**—promoted to Freight Traffic Manager for the Seaboard. He succeeds W. A. Marshall, who will retain his title as Freight Traffic Manager, but who has been assigned special duties.

**F. L. McConnell**—advanced to eastern vice president of the Conoco Chemical Company. In other company advancements, A. B. Haney of Jackson, Mississippi was made southern area Manager, and E. I. Grithn of Roswell, New Mexico was appointed western district manager.

**Ivan E. Welborn**—appointed superintendent of formaldehyde and synthetic resin plant being built by Borden's Chemical Division at Fayetteville, N. C.

**K. C. Laughlin**—named manager of process development at Celanese Corp. of America, Charlotte, N. C.

**Dr. Warren L. Jensen**—formerly director of Continental Oil's central research division, promoted to director of the development and research department's newly created petroleum products division.

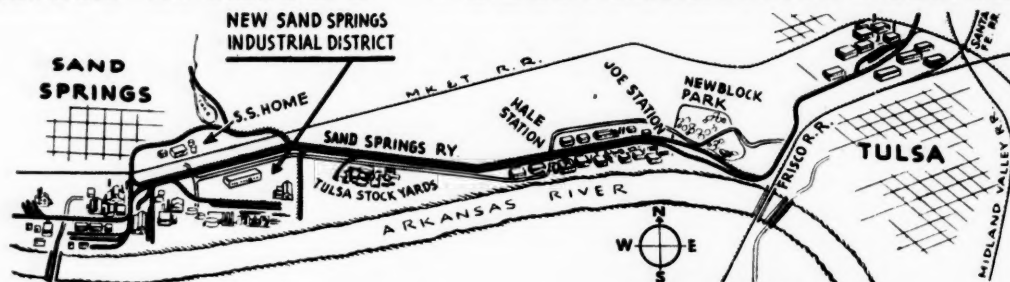
**William H. Kearns, Jr.**—appointed Assistant to the President of the Atlanta Paper Company, according to Arthur L. Harris, President. Kearns was formerly manager of the Southeastern News Bureau for McGraw-Hill Publications.

**E. Grady Perkins** becomes President of recently merged Supreme Inc. and Cleveland Patents, Inc., of Cleveland, Ohio. Perkins was president of Supreme Products, Greenwood, Miss.

**Whittaker Lonsdale**—elected a vice president of the Jefferson Island Salt Company, Jefferson Island, La.

**Dr. W. J. D. Van Dobbenburgh** has been appointed rayon operation manager of the American Enka Corporation, Enka, N. C. **Paul W. Markwood** has been named nylon operation manager. **P. H. Van Scherpenzeel** and **Dr. R. L. Parks** will serve respectively as rayon and nylon chief chemists.

## Nearly 100 Industries Selected Oklahoma's SAND SPRINGS—TULSA Industrial District!



### WHO THEY ARE . . .

Commander Mills, Inc., South West Box Co., Kerr Glass Mfg. Corp., American Smelting and Refining Co., Southwest Porcelain Steel Corp., Pedrick Laboratories, Inc., Orbit Valve Co., National Tank Co., Frank Wheatley Pump and Valve Mfr., Lock Joint Pipe Co., General Paint Corp., American Steel and Wire Co., Bethlehem Steel Co., Lincoln Electric Co., Southwest Steel Corp., Standard Magnesium Corp., Standard Aluminum Co., Enardo Mfg. Co., Sheffield Steel Corp., The Boardman Co., Youngstown Steel Products Co., Mo-Vi, Inc., Boyles Galvanizing Co., Stanley Home Products Co., Santa Fe Engineering and Equipment Co., The Fibercast Corp., Graver Tank & Mfg. Co. and many others.

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G. Maynard Smith, front-running foe of any attempt to impair our free enterprise system, studies law book in his office for next bout with unions in his attempt to stop the evil of . . .

## The Secondary Boycott

A matter of prime importance to individuals throughout the area today is the power of unions to bring economic pressure through secondary boycotts. Here is a thought-provoking discussion of this vital topic by a prominent Georgia attorney who has handled many top labor cases.

By G. MAYNARD SMITH

ATLANTA. Much has been written from both sides of the labor-management aisle about the expected Southern membership drive by labor union organizers, but little consideration has been given to the "silent partner" that rides the organizers' coat tail.

The "silent partner" is a bundle of technicalities and legal complications called a secondary boycott. If the American public and business men were acquainted with the dangers and costs that result from the use of secondary boycotts by union bosses there would be a clamor from Atlanta to Allatoona and from Tampa to Tacoma to outlaw all possible varieties of this vicious tactic.

Secondary boycotts are especially important at this time because they are

used so extensively by labor unions to force compulsory unionism on employees who do not want to join a union. It is a squeeze-play technique to put economic pressure on the employer and compel him to make his workmen join.

It is a device to "organize from the top." The late Robert Denham, former general counsel of the National Labor Relations Board, accurately described secondary boycotts as "economic blackmail."

In brief, in a secondary boycott the union puts pressure on a secondary or neutral employer. They threaten to picket his place of business unless he stops doing business with the primary employer the union is trying to organize. It doesn't matter whether the sec-

ondary employer has a contract with the union. Union officials will consider him "unfair" because he continues to do business with another employer who happens to believe his employees have the right to decide for themselves if they want union membership.

A perfect example of the secondary boycott for organizational purposes is a Texas case recently decided by the United States Court of Appeals in New Orleans. The teamsters union began picketing a number of general contractors in Ft. Worth with an aim of making the general contractors stop doing business with all subcontractors whose truck drivers were not teamster members. The vehicle in this particular instance was to attempt to make the general contractors sign a so-called subcontractor clause that they would not accept bids from subcontractors who employed non-union drivers.

In another instance five innocent companies—three manufacturers, a railroad, and a distributor—found themselves involved in a union organizing drive against a trucking company. They had no interest whatsoever in the dispute; yet, when the Bowman Transportation Company of Gadsden, Ala., attempted to make a delivery or a pick up at these companies, teamster union pickets were on hand. The five firms involved were the Goodyear Tire & Rubber Co. in Gadsden; the Goodyear Decatur Mills in Decatur, Ala.; the Noojin Supply Co., a wholesaler and retailer of hardware in Gadsden; the Dwight Manufacturing Company, a textile manufacturer in Gadsden; and the L & N Railroad. It took more than a year to settle the problem when the National Labor Relations Board overruled its trial examiner and found the union in violation of the Taft-Hartley's secondary boycott prohibitions.

### Cites Atlanta Example

The Campbell Coal Company of Atlanta was a secondary boycott victim in a case that has received national publicity. A union not only picketed Campbell's place of business where it operated as a supplier of building materials, including concrete, but also picketed the company's customers at various construction sites, where concrete was being delivered. The United States Court of Appeals for the District of Columbia reversed the NLRB's finding of an illegal secondary boycott.



Night photo shows bomb damage to a trailer owned by B & S Motor Lines of Nashville, Tennessee. The explosion, caused by unknown persons, occurred September 24, 1955, in McKenzie, Tenn. B & S, which operates mainly between North Carolina and Tennessee became a secondary boycott victim when it refused to make its drivers, who are not employees but independent contractors, join the union.

At this point many business readers may be reminding themselves that they have no difficulties with labor in their communities or that they get along fine with the union leaders.

This is a false sense of security! It is false because the secondary boycott knows no geographical bounds.

Bill Watkins, president of the Watkins Motor Lines in Thomasville, Ga., has had plenty of experience in out-of-state secondary boycotts. When his drivers deliver freight to Northern cities they frequently run into "make-work" demands by Northern unions, enforced under the threat of a secondary boycott. Mr. Watkins told the Chamber of Commerce of the United States that:

"Secondary boycotts force us to pay a union man a full day's pay to get him to help us two hours, where in most cases we have two men on the truck anyhow; and, because they do not choose to belong to a union, they have to stand idly by or pitch in and help and get nothing in pay."

This happens to scores of trucking companies from the South. Of course, there is an effect upon Southern manufacturers who ship by truck.

Up in Wisconsin, the Paine Door and Lumber Company of Oshkosh makes custom-made hospital doors. Their employees were non-union. When a business agent for the Carpenters in Los Angeles saw that these doors lacked his particular union label, he made the union construction workers and carpenters walk off the job. The result was an injury to a wide group of innocent parties. The owners of the hospital project, a church group, suffered a construction delay. The contractors were unable to maintain their construction time table, and the distributor of the doors was fearful that no Los Angeles contractor would buy Paine doors.

Yet before this incident happened, the folks in Oshkosh easily could have said,

"We don't have secondary boycotts up here. We have no labor trouble."

### Threat To Southern Firms

Southern manufacturers are particularly vulnerable to secondary boycotts if they ship their merchandise into strongly organized union areas.

It is obvious that the secondary

boycott is an extremely serious practice. Aside from the great expense and loss it causes its victims, probably its worst effect is that it is a tearing down of the American free enterprise system.

The secondary boycott restricts the public's freedom of choice. It means that a union chief can remove a certain product from the market—in the Paine case, their doors were kept off the market in Los Angeles. It means that a union chief can limit the number of companies available to handle an order. This latter result was the aim of the union in boycotting the Campbell Coal Co. The hope was that customers would be so inconvenienced that they would take their business elsewhere.

Union organizational drives are not the only occasions for employing secondary boycotts. They are used to help win labor disputes, to compel featherbedding and other restrictive labor practices, and to force union members to switch their membership to a competing union.

Nor are secondary boycotts found exclusively in the construction or trucking industries. These are predominant, but any union official, who has no respect for the public and responsible unionism, will attempt a secondary boycott. Until this type of labor tactic is outlawed completely, everyone is a potential victim. An employer can be put out of business! An employee can be put out of a job! And the public can lose its inherent right to do business with whom it chooses!

If secondary boycotts are such a serious problem, why hasn't something been done about them? Something was done nearly 10 years ago, but it isn't working very well.

In 1947 Congress attempted to replace the New Deal Wagner Act with a new national labor law that would be fair to both labor and management. It wrote and passed the Taft-Hartley or Labor-Management Relations Act. Congress thought it outlawed all secondary boycotts when it passed Taft-Hartley, but experience with the act over the years has uncovered glaring loopholes.

They included a section in Taft-Hartley making secondary boycotts an unfair labor practice by unions, but the section has been extremely difficult to administer. It has been difficult because the unions have found



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• Italic face type indicates sustaining members.

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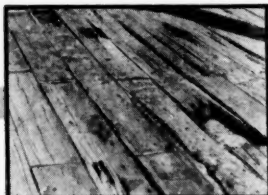
Newport Industries, Inc., Pensacola, Fla.  
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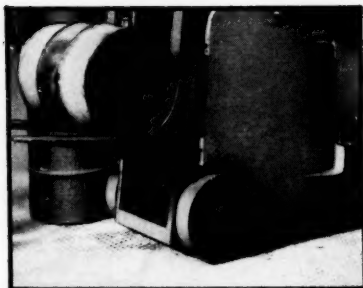
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Virginia Academy of Science

NOTE: Any firm doing business in the South is eligible for membership in the Southern Assn. of Science and Industry. For detailed information and membership application blank contact SASI Headquarters, Conway Bldg., North Atlanta 19, Ga.

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## LABOR

at least half-a-dozen major ways to evade the intent of Congress. For example, the law requires "concerted" activities. This means that to make the boycott illegal a group of employees must be induced to boycott. If the union encourages a single employee, perhaps a key man, it's all right. Hot cargo contracts are another—this involves obtaining the employer's consent in advance to honor a union's demand that he permit a secondary boycott against another firm.

The roving or primary situs doctrine, such as in the Campbell Coal case, is another loophole. This theory permits pickets to follow an employer's truck and picket the truck each time it stops for a delivery.

The legal phrase "in the course of employment" is another one. This means that if the employees have not yet begun work on a job, they can refuse to handle another firm's goods because they are not yet in the course of their employment. A fifth loophole is the NLRB's decision that railroad and agricultural workers are not considered employees within the Taft-Hartley Act's definition of that word.

And probably the most gaping loophole—the one that is used most frequently—is that the law specifically prohibits pressure on employees, but it makes no mention of pressure on employers. The unions interpret this to mean that they are free to coerce neutral employers. This interpreta-

tion has been upheld by the NLRB and the courts.

Thus, there is a federal law against secondary boycotts, but it is not effective, and, under recent Court decisions, there is little the states can do to protect their citizens.

## Progress Comes Slowly

Legally, the picture is black, but I am pleased to note that there is a growing awakening to the evils of the secondary boycott. It is a drowsy awakening, but, fortunately, it gradually is gaining momentum.

Senator Carl T. Curtis of Nebraska on May 14 introduced a bill, S. 3842, which would plug all of the loopholes in the Taft-Hartley Act and also prevent organizational picketing. There will be no real insurance against secondary boycotts until legislation of this type is adopted by Congress.

The Chamber of Commerce of the United States is also alert to the problem of the secondary boycott. Early in 1955 it established a national committee of business executives and labor relations specialists to see what could be done to bring relief from the secondary boycott as one of the foremost of unfair labor practices by union officials.

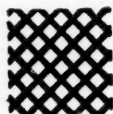
The committee is under the chairmanship of Hoyt P. Steele, president of the Benjamin Electric Manufacturing Company of Des Plaines, Illinois. I am a member of this committee and familiar with its work.

I feel that although the problem is one that can affect every business man—either below or above the Mason-Dixon line—the Chamber's Secondary Boycott Committee is on the right track in pointing out to the American public the unfairness and costliness in permitting union leaders to involve neutral third parties in attempts to win compulsory unionism or greater economic power.

I feel that the secondary boycott is a problem that should command the attention of all Americans. One never knows when they may be the next victim on the union boss' secondary boycott list.

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## LABOR

### TCI Strike Effects Expected To Linger

FAIRFIELD, ALA. A 98-day shut-down of the South's largest steel plant ended recently and although the strike is over the memory and the after-effects linger on.

When Tennessee Coal and Iron finally attains maximum operations again, it is estimated that its employees will have lost \$39.2 million in wages. Another \$39.2 million will have gone down the drain as far as vendors to the company are concerned.

As TCI began the slow, tedious and costly process of unlimbering stilled furnaces and mills, manufacturers in 11 southern states looked hopefully toward the day when steel will again speed to their factories from the giant Birmingham mills.

But Arthur V. Wiebel, president of the division, injected words of caution into hopes for quick recovery.

"TCI's problems in resuming operations are far more difficult than those facing any other steel producer who has been confronted with the national steel strike alone," he said. "The complexity of our situation is multiplied

by a local strike lasting more than three times the duration of the national dispute.

"Regardless of this complexity, in view of the dire emergency, the first product to be shipped from our mills will be cotton ties, which were caught by the strikes and are still stored at our mills. In addition, cotton ties will receive preferred attention in our production schedules."

### New Training Schedule Planned At Oak Ridge

OAK RIDGE. The Special Training Division of the Oak Ridge Institute of Nuclear Studies has announced a partial list of courses to be offered through March of 1957.

Basic four-week courses in the techniques of using radioisotopes will open on October 22, 1956; January 7, and February 4, 1957. Two-week courses in veterinary radiological health for members of the armed forces veterinary corps will open on September 17, October 1, and December 3, 1956; March 4 and March 18, 1957.



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"Cross-roads of the South"—the Bulletin Board section affords a meeting place for all those who are concerned with technological and industrial development in the Southern states.

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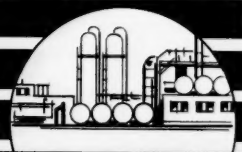
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**Colonel  
M. R.  
Says**

**Proud and Selective Thieves**—Two recent robberies have brought out the fact that thieves are also equipped with human frailties like the rest of us. In Salisbury, North Carolina, a warehouse was broken into and, from thousands of items, the thief walked off with 1,000 spark plugs and nothing else. Those of us who've had experience with gummy plugs can sympathize with him to a certain extent. Probably he yearned for the luxury of a new set of sparkplugs every week. Then, too, in Knoxville, Tennessee, Judge Charles Kelly addressed one Charles Davis: "You're accused of stealing \$30—guilty or not guilty." "Thirty dollars?" Davis roared in hurt tones. "Why, your honor, it was \$200!"

**Wrong Target!**—While yielding to no one in our admiration for the United States Air Force, we got a chuckle out of what happened at Clearwater, Florida, the other day. Literally shining with spit and polish, six airmen appeared at the door of the courthouse and reported that they were the color guard for the school patrol parade. There was no parade scheduled for Clearwater that day. They were at the right door, but the wrong courthouse. The parade was at Tampa, some twenty miles from Clearwater.

**Rock and Roll**—Traffic officer Orval Bennett of Tulsa, Oklahoma, could not believe his ears last week. A station wagon had rolled backward down a driveway, without the benefit of driver, and collided with a car out in the street. When he located the owner of the wagon, he demanded all sorts of proof before he'd believe that he was actually named: "Rock Backward."

**That's a Woman For You**—Will Clark, of St. Charles, Missouri, and his wife Alice are both licensed radio "hams." Recently, she entered Saint Joseph's Hospital to have her third child and Will thought it would be a good idea to rig up a set in her hospital room, so that she could communicate with him. Her first remark over the new hook-up was: "Will, are you sure you washed the dishes?"

**A Bather Leaves the Tub**—William E. Power of St. Louis, was at home minding his own business when it happened. As a matter of fact, he was perpetuating tradition by taking a bath on Saturday night. Then he pulled the plug and—a snake popped out of the opening and bit him on the right toe. William E. Power is now the holder of the world's record for the standing broad jump.

**A Choosy Thief**—Adrian Flippen, who lives in Windmere, Florida, tips the scales at 240 pounds. The other day, a thief stole his size 42 pants as they were flapping in the breeze in his yard. Two days later, the pants were back. There was a note with them: "Returning these. Too large. Why don't you diet?"

## A SOUTHERN REPORT



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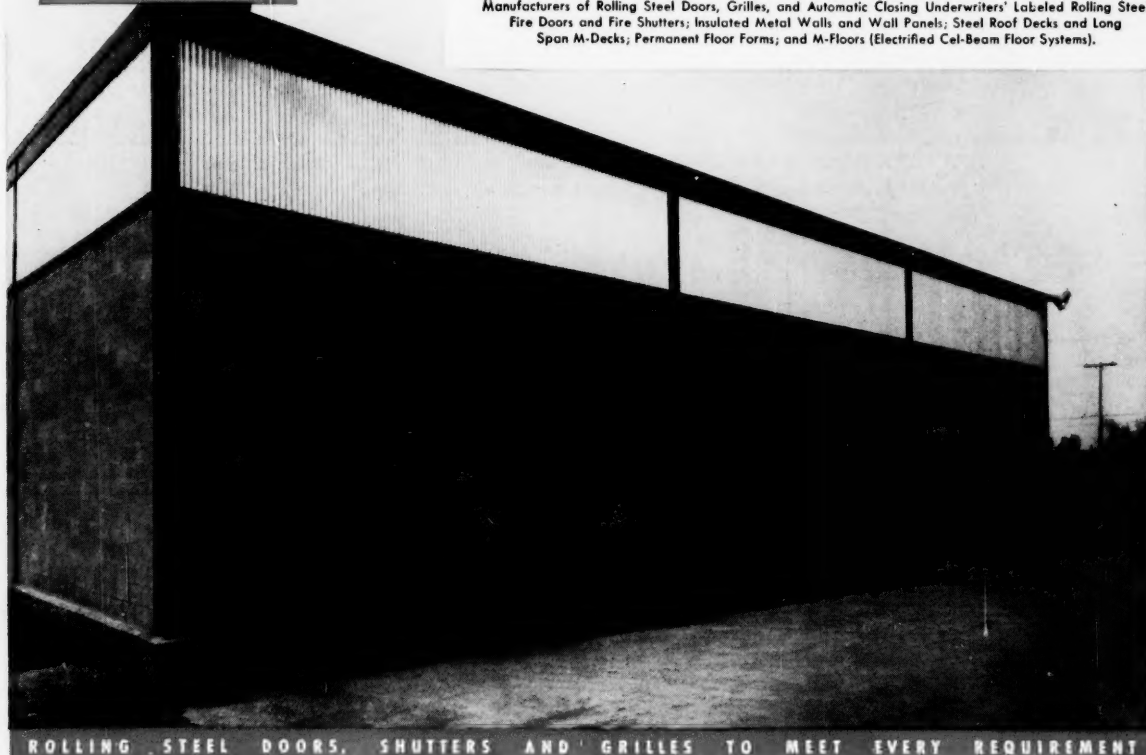
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